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Line Positions and Intensities in the $2\nu_2/\nu_4$ Vibrational System of $^{14}NH_3$ near 5-7 μm

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Abstract

Line positions and intensities belonging to the vibrational system $2\nu_2/\nu_4$ of ammonia $^{14}NH_3$ are measured and analyzed between 1200 and 2200 cm^{-1} in order to improve the molecular database. For this, laboratory spectra are obtained at 0.006 and 0.011 cm^{-1} unapodized resolution and with 4% precisions for the intensities using Fourier transform spectrometers located at the Kitt Peak National Observatory and the Jet Propulsion Laboratory. The observed data contain transitions of the ν_4 fundamental band near 1626.276(1) and 1627.375(2) cm^{-1} (for s and a inversion upper states respectively) and the $2\nu_2$ overtone band near 1597.470(3) and 1882.179(5) cm^{-1} (for s and a inversion states respectively). A total of 2345 lines with J' ≤ 15 is assigned from which 2114 lines positions with J' ≤ 15 are fitted using an effective rotation-inversion-rotation Hamiltonian to achieve a rms of 0.003 cm^{-1} with 57 molecular parameters. Over 1200 intensity measurements are modeled to ±4.7% using 16 terms of the dipole moment expansion. A dyad model is used in order to model all the interactions expected within the $2\nu_2/\nu_4$ system. The bandstrengths of $2\nu_2$ (s←a), $2\nu_2$ (a←s) and ν_4 (s←s and a←a) are estimated to be 6.68(24), 0.201(5) and 116(3) cm^{-2} atm^{-1} respectively at 296 K. The prediction generated by this study is available for planetary studies.

I. INTRODUCTION

Ammonia is the fourth most abundant constituent in the atmosphere of Jupiter, after hydrogen, helium and methane (1). The 5-7 μm window is of particular interest for studies of the giant planets because the detected radiation originates from deep in the atmosphere where pressures are a few bars (1). In particular, in May 1997, the SWS (Short Wavelength Spectrometer) instrument on board of the ISO satellite recorded spectra of the Jovian atmosphere from 2.4 to 45 μm at an average resolving power of 1500. The 5 and 10 μm spectral range of this SWS-ISO spectrum was interpreted with a line-by-line radiative transfer code by Fouchet et al. (2), using the NH_3 spectroscopic data available at that time (3), but the analysis quickly revealed that a more complete and detailed database of spectroscopic parameters of $^{14}NH_3$ in the 1200-2200 cm^{-1} region was needed for the analysis of planetary data.

The goal of the present paper is thus to provide a complete prediction of line positions and intensities for the $2\nu_2/\nu_4$ system of $^{14}NH_3$ at 5-7 μm similar to the studies performed at 4 μm and 3 μm (4-5).

The main absorption of ammonia at 5-7 μm is due to the ν_4 fundamental and the $2\nu_2$ overtone band. With the large inversion splitting of the ν_2 vibrational mode, the $2\nu_2/\nu_4$ system covers an extended range from 1200 to 2200 cm^{-1}. The two overtone components, $2\nu_2$ (s←a), $2\nu_2$ (a←s) centered at 1597.470(3) cm^{-1} and 1882.179(5) cm^{-1}, respectively, are indeed no less than 285 cm^{-1} apart. The two fundamental components ν_4 (s←s) and ν_4 (a←a) are centered at 1626.276(1) cm^{-1} and 1627.375(2) cm^{-1} respectively.

In the past, this spectral range was the object of many investigations of both line positions (6-14) and intensities (3, 15-22). Those studies assigned over 1600 line positions of $^{14}NH_3$, and the analyses revealed a strong Coriolis type coupling between the ν_4 (a←a) and the $2\nu_2$ (s←a) components and also large l-type resonances in ν_4. Urban et al. (6) studied the $v_2 = 1$, $v_2 = 2$, $v_2 = 3$, $v_4 = 1$ and $v_2 = v_4 = 1$ interacting energy system by combining microwave and infrared data. They determined Coriolis couplings and l-type doubling constants using combined data from a vacuum grating infrared spectrometer, a diode laser spectrometer and a submillimeter wave spectrometer. About 420 lines of ν_4 band ($J \leq 11$) and 180 lines of $2\nu_2$ band ($J \leq 12$) were assigned from 1450 to 2086 cm^{-1}. Using a theoretical treatment developed by Spirko et al. (23), the molecular constants for the $v_2 = 2$ and $v_4 = 1$ states were determined by least-squares with a standard deviation of 0.041 cm^{-1}. Later on, Cohen et al. (7) and Urban et al. (8) assigned about 860 perturbation-allowed transitions (in $\Delta K = \pm 3$ and $\Delta K = \pm 2$) in ν_4. More recently, Sasada et al. (9, 10) gathered a number of published measurements and added about 630 new IR measurements ($J \leq 13$) and 153 MW transitions in $v_2 = 2$ (s) and $v_4 = 1$ (s and a). Those authors achieved a root mean square deviation of 0.00038 cm^{-1} for the IR transitions, but when the MW data were weighted according to the experimental accuracy, large IR data deviations were generated. The number of adjusted parameters used was quite important; no less than 91 parameters were needed to model upper state levels of the three components up to $J = 13$, and for 11 pairs of those parameters, there was a strong correlation factor larger than 0.99.

The highest upper state component $v_2 = 2$ (a) was studied up to $J = 11$, $K = 10$ by Lellouch et al. (3) who assigned about 90 transitions in the $2\nu_2$ (a←s) band between 1800-2100 cm^{-1}. Upper state energy parameters of this $2\nu_2$ (a←s) component were also obtained by hot band studies of v_2=2 (a) ← v_2=1 (s) (24-26).

The line intensities with reported precisions of 5% to 15% were measured at high resolution in five prior studies. In the 1480-1596 cm^{-1} spectral range, some 40 experimental intensities from a tunable diode laser spectrometer were reported by Urban et al. (15, 16) for both components of ν_4 (including 18 $\Delta K=\pm 2$ perturbation-allowed transitions) and the lower component of $2\nu_2$ ($s\leftarrow a$). Using Fourier transform spectrometers, Lellouch et al. (3) obtained over 750 line intensities in ν_4 and $2\nu_2$ ($a\leftarrow s$) in the 1800-2100 cm^{-1} range while Aroui et al. (17) measured about 57 P branch line intensities in ν_4 near 1550 cm^{-1}. Most recently, Kralik et al. (18) obtained intensities of 16 R branch lines of ν_4 between 1793 and 1810 cm^{-1}.

None of the previous studies covers the total spectral range of the four components of the $2\nu_2/\nu_4$ system nor do they simultaneously model both line positions and intensities. Therefore, in the present effort, a comprehensive new data set is obtained for the whole region between 1200 and 2200 cm^{-1}. Assignments are extended and completed as much as possible to J = 15. The $2\nu_2/\nu_4$ system is treated as a dyad so that all Coriolis and ''essential'' resonance interactions (''l-type'' and ''K-type'') between the four components $2\nu_2$ ($a\leftarrow s$), $2\nu_2$ ($s\leftarrow a$), ν_4 ($a\leftarrow a$) and ν_4 ($s\leftarrow s$) can be included explicitly. From the modeling of both line positions and intensities, a reliable prediction of the ammonia spectrum is achieved.

In this paper, Section II presents the experimental details. In Section III, we briefly describe the theoretical approach used. Section IV concerns the line positions and intensities analyses and the determination of energy and intensity parameters. Finally, results of Section IV are used in Section V to generate a line-by-line frequency and intensity prediction suitable for the analysis of the Jovian spectrum.

II. EXPERIMENTAL DETAILS

Seventeen laboratory spectra of ammonia were recorded using the National Solar Observatory McMath FTS located at Kitt Peak National Observatory in Arizona, and five spectra were obtained using a Bruker HR120 FTS located at the Jet Propulsion Laboratory. The gas conditions of these data are listed in Table 1. The ammonia gas samples were generally in normal abundance.

The Kitt Peak data were collected during five different observing sessions between 1984 and 1995. The first nine spectra in Table 1 were recorded in the 900 to 2600 cm^{-1} region using two matched As-doped Si detectors and a KCl beamsplitter. The next four runs at higher optical density were taken using the same detectors with a CaF_2 beamsplitter. Finally, four other spectra from 1800 to 5200 cm^{-1}, originally obtained for other studies (4, 5), were also measured to provide intensities of the very weak features throughout the important 5 μm window region. These latter spectra were scanned using matched InSb detectors and a CaF_2 beamsplitter. For all sets, globar sources were used, and scans were integrated for 60 - 70 minutes to achieve signal-to-noise ratios of 300:1 or better.

In order to confirm the absolute accuracies of the intensity data, five additional spectra were recorded at JPL using a HR120 Bruker FTS. For this, a KCl beamsplitter and a Helium-cooled Boron-doped Silicon detector was used with a globar source. Each Bruker spectrum was at 0.006 cm^{-1} resolution. The signal from a globar source was integrated for 3 to 4 hours to record the 6-to-5 μm region.

Seven different absorption cells were utilized in all. Two of these (10. and 4. cm) were made of glass, and the rest were constructed of stainless steel. The path lengths greater than 1.5 m were achieved using multipass cells with base lengths of one meter and six meters. Pressures in the range of 2 to 20 Torr were selected in order to maximize the stability of the ammonia sample in the absorption cells. Pressures and temperatures were monitored continuously during the scanning using, respectively, capacitance manometers and thermistors (or for the 1-m-base white cell, platinum resistance thermocouples. For a few spectra, a second absorption chamber containing low pressure CO was included so that the 1 - 0 band (27) could be employed as the wavenumber calibration standard. For other spectra, the calibration was based on residual water features (28) or by calibrated NH_3 transitions.

The spectra were measured by spectral curve fitting (29) of the unapodized spectrum in the manner described in other ammonia studies (4, 5, 30, 31). In the higher pressure scans, it was necessary to retrieve the self-broadened line widths and to fit features in larger intervals (of 1 to 2 wavenumbers) simultaneously in order to determine the location of the continuum correctly. A sample retrieval is shown in Fig. 1 using the 10.9 Torr spectrum in the region of the $2\nu_2$ (a←s) R branch. In the figure, the observed and computed spectra are overlaid, with the differences between the spectral digits plotted above.

A sample of the resulting individual measurements and the corresponding averaged values are shown in Table 2. The averages are marked by ** with the rms of the differences between the "ith" observed value from the average following the measurement; for intensities, the differences are shown in percent. It can be seen in Table 2 that the measurements cover nearly five orders of magnitude of intensity. Furthermore, there are no large systematic differences in the intensities from run to run.

The question of the absolute accuracies for intensities is addressed by comparing measurements from other instruments. In Table 2, it is seen that the results from the JPL Bruker are within a few percent of those from the Kitt Peak FTS. Furthermore, line-by-line comparisons with most other studies (3, 15-17, 18) also show good agreement with present results. The comparisons are summarized in Table 3, which gives the type of instrument, spectral range, type of transitions, and number of transitions reported by the other studies. Line intensities that were remeasured in the present study were selected, and the mean ratio of the intensities (other/present), the rms in percent and the range of the ratio values were computed. Three of the studies (3, 15 and 17) were found to be within 3 % of the present values, even though these other measurements were done in somewhat different spectral regions with different spectrometers. One study (16), which had also used the FTS at Kitt Peak, reported intensities that were lower by a factor of 17. The source of their systematic error is likely a combination of uncertainty in the optical density and the method chosen to retrieve intensities from a limited number of ammonia spectra. Another study (18) differed by 18% ± 14.5%. Nevertheless, these comparisons suggest that the overall absolute accuracy of the $^{14}NH_3$ intensities in the 5 to 7 μm region is close to 3%, although the precisions of individual transitions vary greatly, as demonstrated by the rms values.

The new spectra in this study were intended primarily for the analysis of the line intensities, rather than for the positions, and thus higher ammonia pressures up to 20 Torr were selected to provide stability in the gas samples. Therefore, accuracies of the line positions taken from these data are affected by self-broadened pressure-induced shifts which are largely unknown. As discussed in the 3 μm study (5), pressure shifts might be as high as 0.00025 cm^{-1} per Torr. Therefore, many of the positions for $2\nu_2$ (s <-- a) and ν_4 were taken from the prior study of Sasada et al. (10); these had been retrieved with a reported accuracy of ± 0.0002 cm^{-1} from a spectrum of 1 Torr (also recorded at Kitt Peak). Toward the end of the present analysis, some 400 line centers were retrieved from a new low pressure spectrum of 0.1 Torr of ammonia (not listed in Table 1); when calibrated with carbon monoxide (27) and water (28) transitions, these new positions were found to agree with the old values with a mean difference of 0.000004 cm^{-1} and an rms of 0.00020 cm^{-1}. However, for the very weakest lines, particularly $2\nu_2$ (a <-- s), the positions were taken from scans with pressures of 6 to 20 Torr so that the accuracies may be ± 0.003 cm^{-1} even for isolated lines (like the R branch lines shown in Fig. 1).

III. THEORETICAL MODEL

As in the 4 μm and 3 μm band system (4, 5), the present analysis of the infrared $^{14}NH_3$ spectrum in the 5-7 μm region uses the theoretical approach based on a vibration-inversion-rotation energy levels parameterization developed by Spirko et al. (23) and Urban et al. (32), and on an intensity parameterization introduced by Pracna et al. (33).

The two bands $2\nu_2$ and ν_4 presently investigated are treated as a dyad system in order to account for the Coriolis type coupling between $2\nu_2$ and ν_4 and also for all essential resonances (l-type and k-type) within $2\nu_2$ or ν_4. All the interactions between the $2\nu_2/\nu_4$ system and other vibrational bands like ν_2, $3\nu_2$ or $\nu_2+\nu_4$ are assumed to be weak enough to be taken into account properly by a perturbation treatment via the contact transformation method. We will see later that this assumption is reasonably valid, as was the case for $3\nu_2/\nu_2+\nu_4$ (4).

The same computer programs set up for the 3 μm region (5) are used in the present investigation. The energy matrix needed in the present work to calculate the upper state energies of the $2\nu_2/\nu_4$ system is very similar (in its rotational dependance) to the upper state energy matrix required for the $3\nu_2/\nu_2+\nu_4$ system. The exact expressions of the energy matrix elements for the diagonal terms and for the essential resonances used in our present study are given in the Table 4. In Fig. 2, we represent the upper state energy matrix with the energy parameters used in the present study to describe the interactions between inversion-vibration-rotation levels. Hereafter we will refer to the different interactions as "Coriolis 1", "Coriolis 2", "2, -1" l-type, "2, 2" l-type, "2, -4" l-type and "k-type" as defined in Fig. 2.

The transition dipole matrix elements corresponding to the transitions investigated in the $2\nu_2$ and ν_4 bands are also similar in their rotational forms to those used in the $3\nu_2$ and $\nu_2+\nu_4$ bands. They can be found in Table IV of Ref. (4). The d_0^i, d_{0n}^i ... and d_1^i, d_{1n}^i... parameters (where i represents the inversion quantum number for the lower state) represent the transition dipole moment and Herman-Wallis corrections for $2\nu_2$ and ν_4 components respectively.

The basis wavefunctions used in Tables III and IV of Ref. (4) and in Table 4 of this paper are the eigenfunctions of the zero order Hamiltonian labeled $|i, v_2, v_4, l_4; J\ K>$ where i = s or a represents the inversion symmetric and antisymmetric components respectively. Like in Refs. (4-5), the energy and transition dipole moment matrices are expressed (before diagonalization) in terms of symmetrized basis functions so that both matrices can be factored according to the symmetry classification of the vibration-inversion-rotation levels within the D_{3h} group.

IV. RESULTS

Energy and intensity parameters are determined by fitting the experimental data. In all our fits of the two upper state levels of $^{14}NH_3$ between 5 and 7 μm, the ground state parameters are fixed to the values reported by Urban et al. (8). Their ground state combination differences are better than 10^{-4} cm^{-1}, and therefore satisfactory for the present study. We thus decided to keep those ground state parameters to be consistent with our previous works (4, 5).

a) Line assignments and upper state energy fit :

Our study covers the spectral range of 1200-2200 cm^{-1}. Starting from the line positions and prior published assignments (3, 8, 10), we extended them up to J= 15.

Using the ground state combination difference method, we increased the number of identified lines from about 1600 to 2345 transitions. In particular, for the relatively weak $2\nu_2$ (a←s) band, some 40 line assignments were added to the 90 previously reported (3).

For the fit of the upper state energies, we discarded all lines corresponding to either multiple or uncertain assignments or corresponding to very weak lines until 2114 transitions remained. They include 1307 allowed transitions and 807 perturbation-allowed transitions. Our best fit in energy has allowed us to reproduce infrared experimental data with an overall rms of 0.0034 cm^{-1} using only 57 parameters for the 2114 fitted lines which all show (observed - calculated) values smaller than 0.020 cm^{-1}. All the transitions are included in the fit with the same weight equal to 1.0. The root-mean-square deviations (rms) in cm^{-1} are given in Table 5 and show the quality of the fit for each vibrational band and each inversion component. The 2114 fitted lines correspond to 114, 108, 245 and 225 different upper state energy levels for $2\nu_2$ (s←a), $2\nu_2$ (a←s), ν_4 (s←s) and ν_4 (a←a), respectively.

Although those rms values do not reach the experimental accuracy, they do represent an improvement over the prior analyses. For the first time, the four symmetric and asymmetric components of $2\nu_2$ and ν_4 are included simultaneously in the model, increasing considerably the total spectral range analyzed in energy and intensity.

Our fit in fact takes into account all assigned lines up to $J \leq 15$. As illustrated in Fig. 3. a for the two components of $2\nu_2$, the observed-calculated values as a function of the upper state energy quantum numbers J' and K' stay around ± 0.003 cm^{-1} up to J = 13, and even when we add almost one hundred lines at higher J, the quality of the fit is similar. In particular, the $2\nu_2$ (a ←s) component, which is analyzed for the first time together with the other components, is rather well reproduced. There are 21 parameters fitted for $v_2 = 2$, 27 for $v_4 = 1$ and 9 parameters fitted to describe the $2\nu_2/\nu_4$ Coriolis coupling. No strong correlation between the parameters is observed, except between the diagonal η_J^s and η_K^s parameters (correlation of 0.99). We tried to eliminate this correlation by fitting only one of those parameters and fixing the other one to zero, but the rms deviation of the fit increased considerably in this case.

In the present least square fit, the choice of the higher order terms was sometimes difficult. In order to choose the best and the most predictable set of parameters, we had to iterate between the position fit to the intensity fit. The decision to introduce a parameter in the energy fit was taken after considering its uncertainty, its correlation with other parameters and its influence on the intensity fit.

The tables that follow show our results with those from other investigations. However, comparisons with previous studies are difficult even with the most complete analysis done by Sasada et al. (10) who did not include in their fit the $v_2 = 2$ (a) component and needed 91 parameters to fit 785 lines.

Tables 6.a and 6.b compare the parameters used in the fundamental state (8) and those obtained by our fits in different vibrational systems (4, 5). Table 6.a presents the parameters corresponding to the ν_2 overtones (ν_2, $2\nu_2$ and $3\nu_2$), while Table 6.b gives the parameters corresponding to the ν_4 overtones (ν_4 and $2\nu_4$) and to the combination band $\nu_2+\nu_4$. Table 6.c shows the values of the Coriolis interaction parameters for the $2\nu_2/\nu_4$ system and the $3\nu_2/\nu_2+\nu_4$ system. Throughout Tables 6, the columns (s) give the values of the parameters for the symmetric component and the columns (a-s) give the differences of the parameters between the asymmetric and symmetric components.

In Table 6.a, we note that the values of the rotational parameters B_v and C_v, as well as the centrifugal distorsion parameters D_v and H_v, show large differences with the values in the ground vibrational state when the inversion mode ν_2 is involved. For ν_4, the second order centrifugal distortion parameters D_J, D_{JK} and D_K are not significantly different from the fundamental values (8) or from those obtained by Sasada et al. (10), but for the $3\nu_2$ overtone, they change sign. The same effect is also seen for the higher order terms H_J, H_{JK}, H_{KJ} and H_K, except that the change of sign already occurs for $2\nu_2$. For the $2\nu_2^a$ component, the values of the fourth order centrifugal distortion parameters are in agreement with those obtained by D'Cunha (25) in their $2\nu_2^a \leftarrow \nu_2^s$ hot band studies. The values of the eighth order centrifugal distorsion terms are kept fixed to their ground state values from Ref. (8), as was done in the $3\nu_2/\nu_2+\nu_4$ and ν_1/ν_3 /$2\nu_4$ studies (4, 5).

In Table 6.b, among all the "essential" resonance parameters, only the l-type interaction parameters q_2 and f_4 (and their J and K dependance) have a sign determined by the giant l-type splitting occuring in ν_4. The values obtained for q_2 and f_4 are positive, as presented in Tables 6. On the other hand, the relative signs of the q_{3v}, q_1, c_2 and c_1 parameters (and their rotational dependances) are not determined by the fit, and changing all the signs of this series of parameters does not modify the fit. In the same way, changing the relative signs of c_1 and c_2 (and their rotational dependances) does not change the fit.

In Table 6.c, we show the values of the Coriolis parameters for the $2\nu_2/\nu_4$ and $3\nu_2/\nu_2+\nu_4$ systems. Contrary to the $3\nu_2/\nu_2+\nu_4$ system, the leading Coriolis type interaction c_1^s term between the two vibrational states $2\nu_2$ and ν_4 is very well determined due to the proximity of the $v_2 = 2$ (s) and $v_4 = 1$ (a) components, and no less than nine parameters are needed to describe properly the interaction between the two bands. Contrary to the symmetric component, the difference between the symmetric and asymmetric component of this Coriolis parameter ($c_1^a - c_1^s$) between the $2\nu_2^a$ and ν_4^s components cannot be determined in our fit due to the fact that the $2\nu_2^a$ component is far away from the ν_4^s component, even though the first order correction in K of this difference ($c_{1K}^a - c_{1K}^s$) appears to be significant. Our best fit (both in energy and intensity) is obtained by fixing the first order interaction term (c_1^a) between $2\nu_2^a$ and ν_4^s to the same value as the c_1^s parameter.

All those interaction parameters are determined by fitting a large number of allowed and perturbation-allowed transitions for both the $2\nu_2$ and ν_4 bands. In Table 7, we present the standard deviation (in cm^{-1}) and the number of perturbation-allowed transitions fitted. With such a good modeling of the positions, most of the intensities of perturbation-allowed transitions can be well reproduced also (see next section). Finally, some 48 vibrationally mixed transitions involving a strong mixing between the $2\nu_2$ and ν_4 upper states (50 - 50 mixing) are also included in the fit which show a rms deviation of 0.0032 cm^{-1}.

Due to the strong Coriolis interaction between the $v_2 = 2$ (s) and $v_4 = 1$ (a) upper state energy levels, avoided crossings are observed for high J values between 9 and 11 and K values ranging from 1 to 8 (except for K = 2) of the $2\nu_2^s$ component. An avoided crossing between the $v_2 = 2$ (s) and $v_4 = 1$ (a) upper state energy levels due to the fourth order Coriolis interaction is also observed for J = 12 and K = 6 of the $2\nu_2^a$ component. Consequently, the first order (c_1^s, c_{1J}^s and c_{1K}^s) Coriolis interaction parameters are well determined in our fit (as well as their relative sign) and induce a strong mixing between the energy levels. For most upper state energy levels, the mixing of the basis wavefunctions $|i, v_2, v_4, l_4; J\ K\rangle$ in the eigenfunction correspond to 10/90 % to 30/70 % and this rotational-vibrational mixing has a significant influence on the intensity, as shown in the next section.

b) Intensity Fit

In the present work, some 1203 intensity measurements between 1253 and 2134 cm^{-1} were modeled with a rms of 4.7 %. As seen in Table 5, some 142, 112, 501 and 426 transitions from $2\nu_2$ (s←a), $2\nu_2$ (a←s), ν_4 (s←s) and ν_4 (a←a) band, respectively, as well as 22 vibrationally mixed transitions were included in the fit. The standard deviations in Table 5, calculated as $[I_{obs} - I_{calc} / I_{obs}] \times 100$ for each vibrational component, are 5.0 % for $2\nu_2$ (s←a,s), 3.0 % for $2\nu_2$ (a←s,a), 5.0 % for ν_4 (s←s,a), 4.8 % for ν_4 (a←a,s) and 5.5 % for 22 vibrationally mixed lines, similar to the 5 % experimental accuracy. Fig. 3.b. shows the observed-calculated intensities (%) as a function of the lower state quantum numbers J" and K" for the allowed transitions ^{q}Q, ^{q}P and ^{q}R of the two components of $2\nu_2$. As in the energy fit, we were able to include in the intensity fit as many high J values as possible, in particular for the newly modeled $2\nu_2$ (a←s) component. Thus we believe that this demonstrates the reliability of the model to reproduce the measurements and to predict the spectrum through the full range of the observed values of J.

The Appendix presents all the fitted line intensities; it lists the line assignment (column I-III), the observed line position (IV), the difference between observed and calculated positions (in 10^{-3} cm^{-1}) (V), the measured intensity (So) (VI) and corresponding estimated measurement uncertainty in percent (VII), the difference between measured and calculated intensities in percent (So - Sc / So) (VIII) and the number of optical densities used for the intensity measurement (IX).

The sixteen fitted transition moment parameters are given in Table 8 which lists the parameters as defined in Table IV of Ref. (4), the retrieved values and uncertainties by vibrational component and the rotational quantum number dependance associated with each term. Only parameters showing a test value greater than twice the overall test value were retained as significant parameters.

Prior to selecting which transition moments to use, it was necessary to evaluate the effect of the implicit interactions on the calculated intensities. It was found that the intensity of $2\nu_2$ (a←s) component is particularly sensitive to the Coriolis interaction modeling between $2\nu_2^{a}$ and ν_4^{s} components. If, in the energy fit, all the Coriolis interaction parameters (including all the J and K dependance of those parameters) between $2\nu_2^a$ and ν_4^s components are set equal or opposite to those between $2\nu_2^s$ and ν_4^a components, the $2\nu_2^a$ intensities are greatly overestimated (up to 90%), particularly in the R branch. On the other hand, when we consider the c_1^a value different from the asymmetric component c_1^s (i.e. when we try to fit both the c_1^s parameter and the difference (c_1^a - c_1^s) in the energy fit), we note that the $2\nu_2^a$ intensities are not well modeled either; the standard deviation goes up to about 12% for this component, and there is no significant decrease in the standard deviation for the other bands. Finally, we conclude that the best intensity calculation is obtained when, as already mentioned in the previous section, we fit only the c_1^s parameter, constrain the difference c_1^a-c_1^s to zero, and fit both the c_{1K}^s and the difference (c_{1K}^a - c_{1K}^s) .

For the ν_4 band, we need seven intensity parameters (the leading term d_1 and six Herman-Wallis terms d_{11}, d_{12}, d_{15}, d_{16}, d_{17} and d_{18}) to model 927 lines with a rms deviation of 4.9 %. The differences d^a - d^s for those ν_4 band parameters are not found to be significant and are set to zero. For the $2\nu_2$ band, nine intensity parameters (the leading terms for the s and a components d_0^s and $(d_0^a - d_0^s)$ and four Herman-Wallis terms d_{01}^s, d_{02}^s, d_{03}^s and d_{04}^s and three of their (d^a - d^s) corresponding values) were required to fit 254 lines to a rms deviation of 4.1%. The group of d_{11}, d_{12}, d_{15} , d_{16} and d_{01}, d_{02}, d_{03} and d_{04} intensity parameters (as defined in Table IV in Ref. (4)) represents the J and K dependance Herman - Wallis correction of the leading term d_1 for ν_4 and d_0 for $2\nu_2$ respectively. The role of those Herman-Wallis corrections is very important: if we fit only the leading terms, the standard deviation goes up to 68 % for the ν_4 band and to 28 and 60 % for the $2\nu_2$ (s) and $2\nu_2$ (a) components. The d_{17} and d_{18} (the J (J+1) dependance of d_{17}) intensity parameters become determined only when we take into account in the fit the perturbation-allowed transitions in $\Delta J = 0, \pm 1$ and $\Delta K = \pm 2$ of ν_4 (noted ''O'' and ''S'' in the Appendix).

As it can be seen in Table 7, these perturbation-allowed transitions of the ν_4 band in $\Delta K = \pm 2$ are reproduced with a 6.5 % rms standard deviation, slightly larger than the experimental accuracy. It is to note that for the first time we were able to model a large number of perturbation-allowed transitions, not only in energy but also in intensity.

For a given inversion state, we consider the vibrational dipole moments defined as following :

$$<\mu_v> 2\nu_2\ (a\leftarrow s) = |\ d_o^s\ |\ /\ \sqrt{2}\ = 0.003256(35)\ D \qquad (1)$$

$$<\mu_v> 2\nu_2\ (s\leftarrow a) = |\ d_o^a\ |\ /\ \sqrt{2}\ = 0.02036(25)\ D \qquad (2)$$

$$<\mu_v> \nu_4\ (s\leftarrow s) = |\ d_1^s\ | = <\mu_v> \nu_4\ (a\leftarrow a) = |\ d_1^a\ | = 0.08408(34)\ D \qquad (3)$$

In Table 9, we show the total integrated band intensity S_v(int) (sixth column), defined by the summation of all the transitions associated with a band :

$$S_v(\text{int}) = \sum_{\Delta J, \Delta K} S_A^B \qquad (4)$$

where S_A^B is the line intensity of a ΔJ, ΔK transition from state A to state B predicted by our model. This prediction is calculated up to J = 15, using the energy and intensity parameters from Tables 6.a, 6.b and 8 respectively, and taking the total partition function equal to 577.16 at 296 K as calculated by Urban et al. (15). The number of transitions (second column) and the minimum and maximum positions (third and fourth column) used for calculating this sum are also shown in Table 9. We can also define the vibrational bandstrength S_v^o such as:

$$S_v(\text{int}) = \sum_{\Delta J, \Delta K} S_A^B = S_v^o \left[\sum_{\Delta J, \Delta K} R_A^B(\Delta J, \Delta K).\ F(m) \right] \qquad (5)$$

where $R_A^B(\Delta J, \Delta K)$ contains the rotational part of the intensity as defined in Ref. (34). F(m) is the Herman-Wallis factor and describes the m dependance (m = $-J_A$ in P branch, m = $J_A + 1$ in R branch) and K dependance of the effective vibrational transition moment :

$$S_v\ (\text{int}) = S_v^o \sum_{\Delta J, \Delta K} R_A^B\ (\Delta J, \Delta K).(1 + \frac{d_{np}}{d_n} + \frac{d_{np'}}{d_n} m + 2\frac{d_{np'}}{d_n} K + ...) \qquad (6)$$

Where d_n, $d_{np'}$, ... are the Herman-Wallis coefficients defined in Table 8 for each component.

If we assume that $\sum_{\Delta J,\Delta K} R_A^B(\Delta J,\Delta K).F(m) \approx 1$, the total integrated band intensity is approximated by the S_v^o vibrational bandstrength expressed by (in $cm^{-2}atm^{-1}$):

$$S_v(\text{int}) \approx S_v^o = \frac{8\pi^3}{3hc} \cdot \frac{\nu_o £T_o}{Q_v(T).\,T} \cdot <\mu_v>^2 \qquad (7)$$

with £ = 2.68675 × 10^{19} molecules.cm^{-3}.atm^{-1} at T_0 = 273.15 K. The band centers ν_o are taken from Table 6 and $<\mu_v>^2$ is the vibrational dipole moment for each component from Eq. (1)-(3). In Eq. (7), Q_v is the vibrational partition function and is equal to 1.022(10) in the harmonic approximation (35) with the band centers from Refs. (4, 5). The uncertainty on the vibrational partition function is estimated to be 2%.

The assumption that leads to Eq. (7) is valid as long as the vibrational band under study is relatively isolated and as long as the mixing of the wavefunctions describing the upper state energy levels is small. For the $2\nu_2/\nu_4$ system, this mixing is not so small due to the Coriolis-type and l-type interactions and so the value of the total vibrational bandstrengths S_v^o (123 (3) cm^{-2} atm^{-1} at 296 K) shown in the last column of Table 9 differs by 5 % from the total integrated band intensity, equal to 117 (6) cm^{-2} atm^{-1} but is still within the error bar.

In our previous study of the $3\nu_2/\nu_2+\nu_4$ system (4), the Herman-Wallis correction was introduced in the calculation of the vibrational bandstrength. As we noticed that the d_{12} Herman-Wallis correction for $\nu_2+\nu_4$ was especially large, a so-called "effective" vibrational transition moment was therefore introduced (see Eq. (7) in Ref. (4)):

$$\left|\left\langle \mu_{V=\nu_2+\nu_4}\right\rangle\right|^2 = d_1^2\left(1+\frac{d_{12}}{d_1}\right)^2 \qquad (12)$$

For the ν_4 band presently studied, we could in principle consider the same development for the vibrational transition moment as the d_{11} (m dependance) Herman-Wallis correction is especially large and even larger than the d_{12} (K dependance) Herman-Wallis correction. But the introduction of the d_{11} Herman-Wallis correction in the S_v^o vibrational bandstrength is not straightforward as its effect is different for each ΔJ branch. So none of those effects were thus considered here.

Table 10 shows a comparison between the values we obtained for the transition dipole moment matrix elements, $< 0^{s(a)}, 0^0 | \mu_z | 2^{a(s)}, 0^0 >$ and $< 0^{s(a)}, 0^0 | \mu_x | 0^0, 1_{\pm}^{1\,s(a)} > = < 0^{s(a)}, 0^0 | \mu_y | 0^0, 1_{\pm}^{1\,s(a)} >$ for the $2\nu_2$ and ν_4 bands respectively, and those obtained by different authors. For ν_4 (last column of Table 10), we note that our transition dipole moment value is not too different (within about 1-6 %) from previous studies. Aroui et al. (17) gave two different values for the symmetric ν_4 (s) and antisymmetric ν_4 (a) transition dipole moments. The theoretical approach those authors used involves only the ν_4 band, and no Coriolis coupling with the $2\nu_2$ band was taken into account explicitly, which makes the comparison with our dyad model difficult. In our case, only the intensity parameters corresponding to the transition dipole moment of the ν_4 (s,a$\leftarrow$s) band were required. The differences between the (s) and (a) intensity parameters are not found to be significant, as indicated above.

For the $2\nu_2$ (s$\leftarrow$a) component (second column of Table 10), the only other experimental values available for comparison are from Urban et al. (15) who used only 10 transition measurements for this component to fit the dipole moment transition. Their value is about 11 % larger than ours. For the transition dipole moment matrix element of the $2\nu_2$ (a$\leftarrow$s) component (first column of Table 10), our value is the first one obtained from direct (experimental intensities) measurements. The value of the transition dipole moment listed in Ref. (15) involves a mixing coefficient analysis in energy and some consideration about the ratio of the ν_2 and 2 ν_2 transition dipole moment. Urban et al. (15) obtained a value about 10 times higher than ours and an opposite sign (relative to the other components). Finally, the ab initio values from Pracna et al. (33) are in fairly good agreement with ours.

Table 11 summarizes the comparison between the values we obtained for the bandstrengths and values from earlier literature. We are in good agreement with the bandstrength of the ν_4 band obtained from experimental measurements by Aroui et al. (17) and in reasonable agreement with the average of the values obtained in the low resolution studies (19-22). Also, we can calculate from Eq. (7) the bandstrength obtained by Urban et al. (15) using his values of the vibrational transition moment matrix element. Although they used 10 relatively unperturbed transitions for evaluating the ν_4 transition dipole moment, their values are not far from ours.

The energy and intensity parameters are also used to generate a line-by-line frequency and intensity prediction of $^{14}NH_3$ of the $2\nu_2/\nu_4$ system for all the transitions with J = 15, with an intensity cut-off of 1.0×10^{-5} $cm^{-2}atm^{-1}$ at 296 K, which is sufficient for planetary purposes. A comparison of observed and calculated spectra is shown in Fig. 4. In the top panel, the calculated spectrum is based on the line parameters in the HITRAN database (37) while the bottom panel shows the same interval calculated with the present results. This complete data file is available from the authors.

V. First application to planetary spectra analysis

As a preliminary illustration, the present prediction was used for a calculation of a synthetic spectrum of Jupiter at 4.8-5.5 μm. The 5 μm region of Jupiter's spectrum includes absorptions by CH_4, H_2O, NH_3, PH_3, GeH_4, CH_3D, as well as a continuum H_2-He and cloud opacity. Further details of the modeling can be found in Ref. (2).

In Fig. 5 (solid line), two synthetic spectra are compared, calculated respectively with the $^{14}NH_3$ spectroscopic line list of Lellouch et al. (3), and the one resulting from the present study, all other parameters being fixed. Using the data of this study results in less absorption in several NH_3 lines, especially at 5.13 μm (1950 cm^{-1}), 5.16 μm (1940 cm^{-1}), 5.21 μm (1920 cm^{-1}), and in the Q-branch of the $2\nu_2$ ($a \leftarrow s$) band centered at 5.31 μm (1882 cm^{-1}). In contrast, the continuum longward of 5.4 μm is lowered, since the new line list includes more weak lines than those of (3).

These differences warrant a reinterpretation of the planetary spectra, and in particular of the high quality ISO-SWS observations acquired in 1997. Such a task will be presented elsewhere, but preliminary simulations indicate that, compared to the results presented in Ref. (2), the NH_3 mixing ratio in Jupiter's atmosphere should be increased by a factor of 1.6 at 2 bar, smoothly reducing to 1.1 at 4 bar and higher pressures (Fig. 5, dashed line). This already illustrates the importance of an accurate NH_3 line list.

VI. CONCLUSION

Our theoretical approach to treat the $2\nu_2/\nu_4$ system as a dyad in interaction isolated from the ν_2, $3\nu_2$ and $\nu_2+\nu_4$ bands has allowed us to reproduce the line positions and intensities reasonably well up to J = 15. This approximation is validated by the present work which required a relatively small number of parameters in energy and intensity to achieve a reasonable agreement with the high resolution infrared spectra. However, as is usually the case, we do not expect predictions arising from this effort to extrapolate to much higher values of the quatum numbers; at some point accidental degeneracies with the higher levels of $3\nu_2$ (s) will require an expanded polyad analysis to be performed.

We have now investigated the inversion-vibration bands of ammonia in three separate vibrational systems between 1200 and 3600 cm^{-1} using measurements from the same FTS: 5-7 μm (present study), 4 μm (4) and 3 μm (5). Using a polyad system to describe the interactions in each region, we have been able to determine a set of energy and intensity parameters in order to predict the spectral positions and intensities with the accuracy needed for planetary applications that involve the cold atmospheres of the outer planets. To achieve these results, it has been important to perform a simultaneous analysis of both energies and intensities using a comprehensive set of good quality measurements. We have also found some limitations in our approach. In our different studies, we have noticed that the parameters in the ν_2, $2\nu_2$ and $3\nu_2$ overtones did not show any convergence. This effect does not seem to appear for ν_4 and $2\nu_4$, and is probably related to the large inversion splitting of the ν_2 mode. Therefore, the intensity analysis we performed based on the energy parameters helped us to confirm our choice. This approach allows one to study each region independently from others.

Another problem encountered in the infrared studies of NH_3 is the large number of inversion-vibration bands in interaction. In the 3 μm region for example, we did not include the $4\nu_2$ and $2\nu_2+\nu_4$ bands. For $4\nu_2$ (s), the assignments were too uncertain, and for the $2\nu_2+\nu_4$, the band was too weak. To complete the assignments in this region, we are studying the $\nu_1 \leftarrow \nu_2$, $\nu_3 \leftarrow \nu_2$, $2\nu_4 \leftarrow \nu_2$, $4\nu_2 \leftarrow \nu_2$ and $2\nu_2+\nu_4 \leftarrow \nu_2$ hot bands in frequency and intensity.

As indicated by the missing lines in Fig. 4, the 5-7 μm region of ammonia will not be completly characterized without the inclusion of hot bands. Therefore, in addition to the present 5 μm study and to the 4 μm $3\nu_2/\nu_4+\nu_2$ system (4), we are also assigning and modeling the intensities for the $3\nu_2 \leftarrow \nu_2$ and $\nu_4+\nu_2 \leftarrow \nu_2$ hot bands. The modelling of exoplanet atmospheres (38) and brown dwarf stars with relatively high temperatures (~1000 K) will probably require consideration of more hot bands of ammonia. For the present, our study of the 5 to 7 μm region can facilitate the initial detection of ammonia in these objects.

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Figures Captions.

Fig. 1 : Retrieval of positions, intensities and widths using least squares curve fitting in the region of the R (7,0) and R (7,1) $2\nu_2$ (a←s) R branch. The lower panel shows the observed and synthetic spectrum overlaid. The upper panel shows the differences between the two spectra digits in percent. The spectrum is recorded at 0.011 cm^{-1} resolution using the FTS at Kitt Peak. The path is 433 m cell and the pressure of the $^{14}NH_3$ sample is 6.5 Torr at 297.4 K.

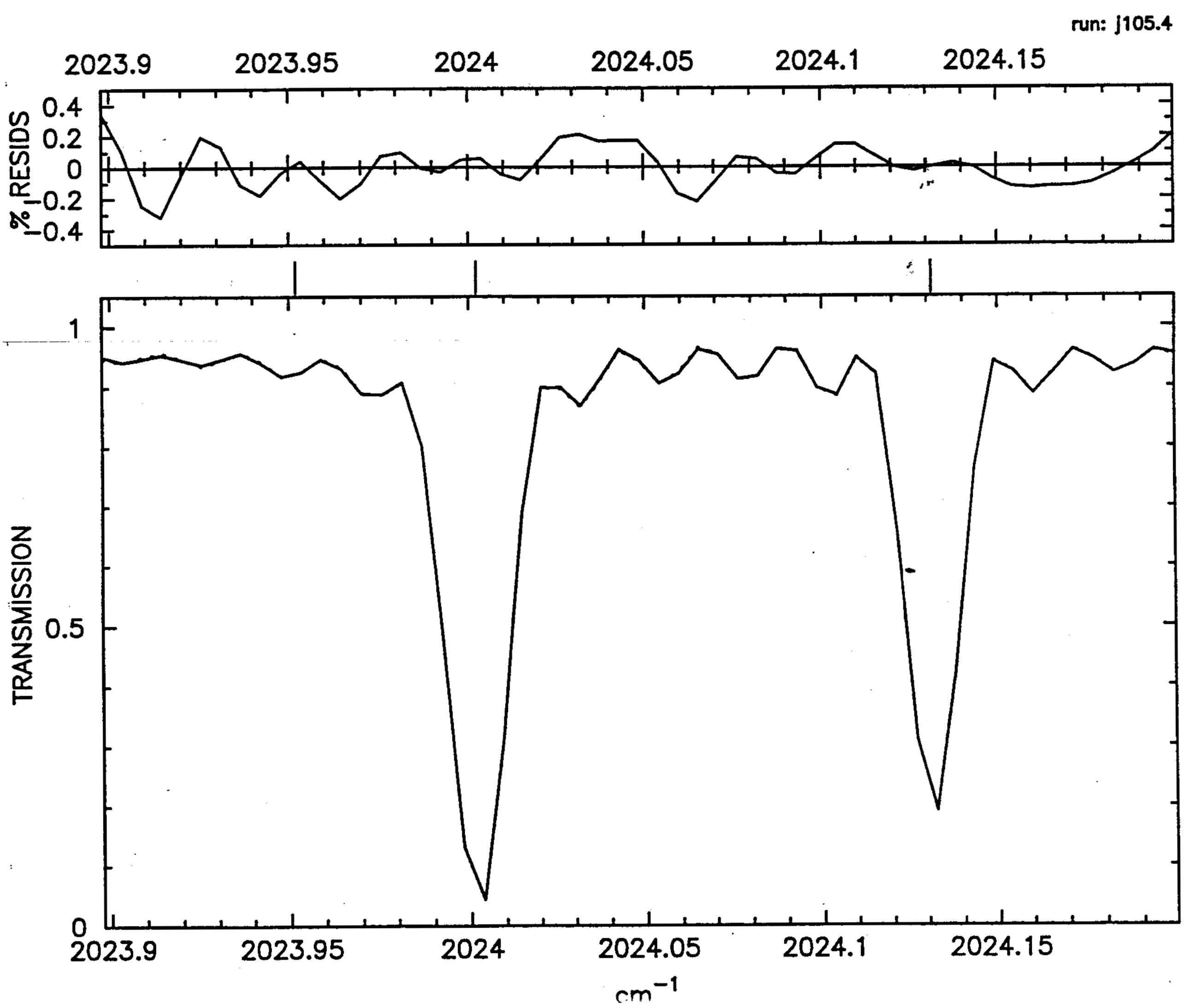
Fig. 2 : Interaction blocks in the upper state energy matrix for the $2\nu_2/\nu_4$ system of $^{14}NH_3$.

Fig. 3 : Panel A. : Observed-calculated values for the energy levels (in 10^{-4} cm^{-1}) as a function of upper state quantum numbers J' and K' for the two components of $2\nu_2$.

Panel B. : Observed-calculated values $[I_{obs} - I_{calc} / I_{obs}] \times 100$ from the intensity fit (in %) as a function of lower state quantum numbers J" and K" for the ^qR, ^qQ and ^qP branches of $2\nu_2$ (s ← a) component (left panel) and of $2\nu_2$ (a ← s) component (right panel).

Fig.4 : Comparison of observed and predicted spectra of ammonia. Using an observed Kitt Peak FTS spectrum recorded at 0.0056 cm^{-1} resolution with a path of 0.25 m and a pressure of 5.5 Torr at room temperature, the improvement of the prediction is shown. The upper panel shows the observed and synthetic spectra based on the 1996 HITRAN database and the lower panel shows the present results. The features missing in the prediction are generally hot band transitions.

Fig.5 : Comparison between two synthetic spectra of Jupiter calculated with the NH_3 spectroscopic data of Lellouch et al. (3) (solid line) and of this study (dotted line).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1
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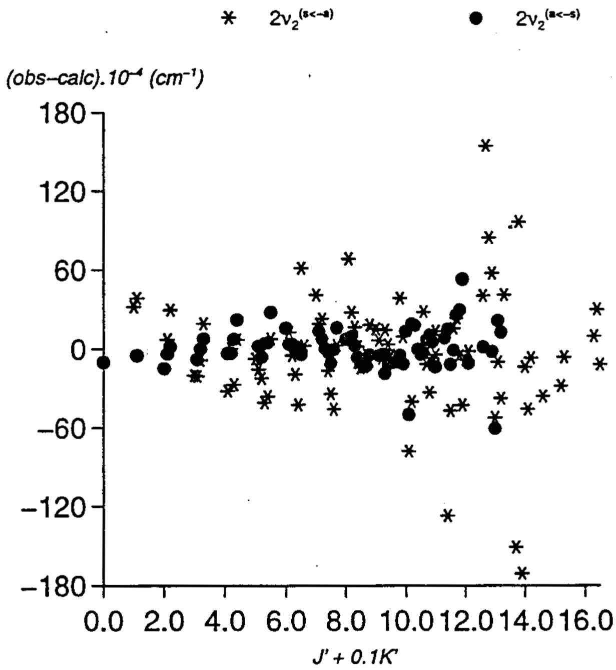
	$v_2 = 2$; a	$v_2 = 2$; s	$\nu_4 = 1$; a	$\nu_4 = 1$; s
$v_2 = 2$; a	Diagonal terms.	“ essential ” resonances : “k-type” $\Delta K=\pm 3$: $\mathbf{q_{3v}}$	Coriolis $\Delta v_2=-2$ $\Delta v_4=+1$: “Coriolis 2” $\Delta K=\pm 2$ $\Delta l_4=\mp 1$: $\mathbf{C_2^a}$ “Coriolis 4” $\Delta K=\pm 4$ $\Delta l_4=\pm 1$: $\mathbf{C_4^a}$	Coriolis $\Delta v_2=-2$ $\Delta v_4=+1$: “Coriolis 1” $\Delta K=\pm 1$ $\Delta l_4=\pm 1$: $\mathbf{C_1^a}$, $\mathbf{C_{1K}^a}$, $\mathbf{C_{1K1}^a}$, $\mathbf{C_{1J}^a}$
$v_2 = 2$; s		Diagonal terms.	Coriolis $\Delta v_2=-2$ $\Delta v_4=+1$: “Coriolis 1” $\Delta K=\pm 1$ $\Delta l_4=\pm 1$: $\mathbf{C_1^s}$	Coriolis $\Delta v_2=-2$ $\Delta v_4=+1$: “Coriolis 2” $\Delta K=\pm 2$ $\Delta l_4=\mp 1$: $\mathbf{C_2^s}$ “Coriolis 4” $\Delta K=\pm 4$ $\Delta l_4=\pm 1$: $\mathbf{C_4^s}$
$\nu_4 = 1$; a			Diagonal terms. “ essential ” resonances : “2, 2” l-type $\Delta K=\pm 2$ $\Delta l_4=\pm 2$: $\mathbf{q_2^a}$ “2, -4” l-type $\Delta K=\pm 4$ $\Delta l_4=\mp 2$: $\mathbf{f_4^a}$	“ essential ” resonances : “k-type” $\Delta K=\pm 3$: $\mathbf{q_{3v}}$ “2, -1” l-type $\Delta K=\pm 1$ $\Delta l_4=\mp 2$: $\mathbf{q_1}$
$\nu_4 = 1$; s				diagonal terms. “ essential ” resonances : “2, 2” l-type $\Delta K=\pm 2$ $\Delta l_4=\pm 2$: $\mathbf{q_2^s}$ “2, -4” l-type $\Delta K=\pm 4$ $\Delta l_4=\mp 2$: $\mathbf{f_4^s}$

Note : for the non-diagonal elements, only the quantum numbers which are varying are indicated.
Only the lowest order parameters of Table III of Ref. (4) and Table 4 of this paper are indicated.



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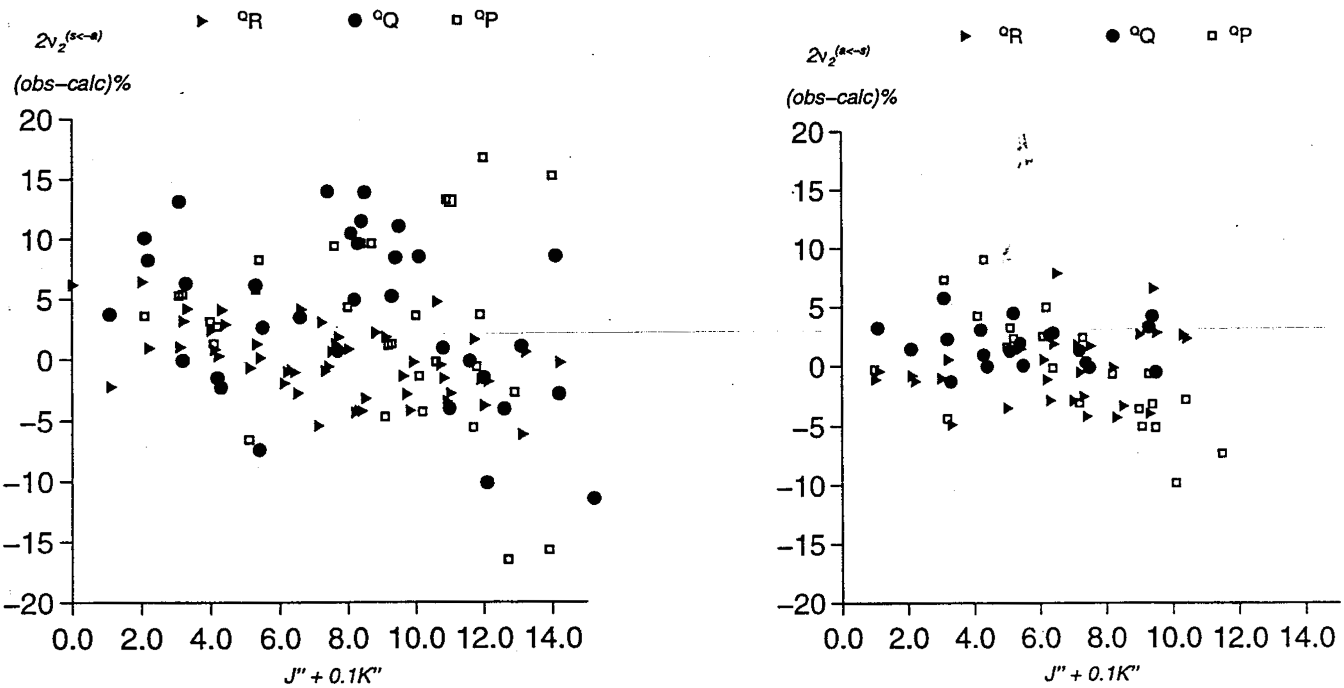
2ν2(a<-s)
(obs–calc).10⁻⁴ (cm⁻¹)
180
120
60
0
–60
–120
–180
0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0
J' + 0.1K'

A



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qR
qQ
qP
(obs–calc)%
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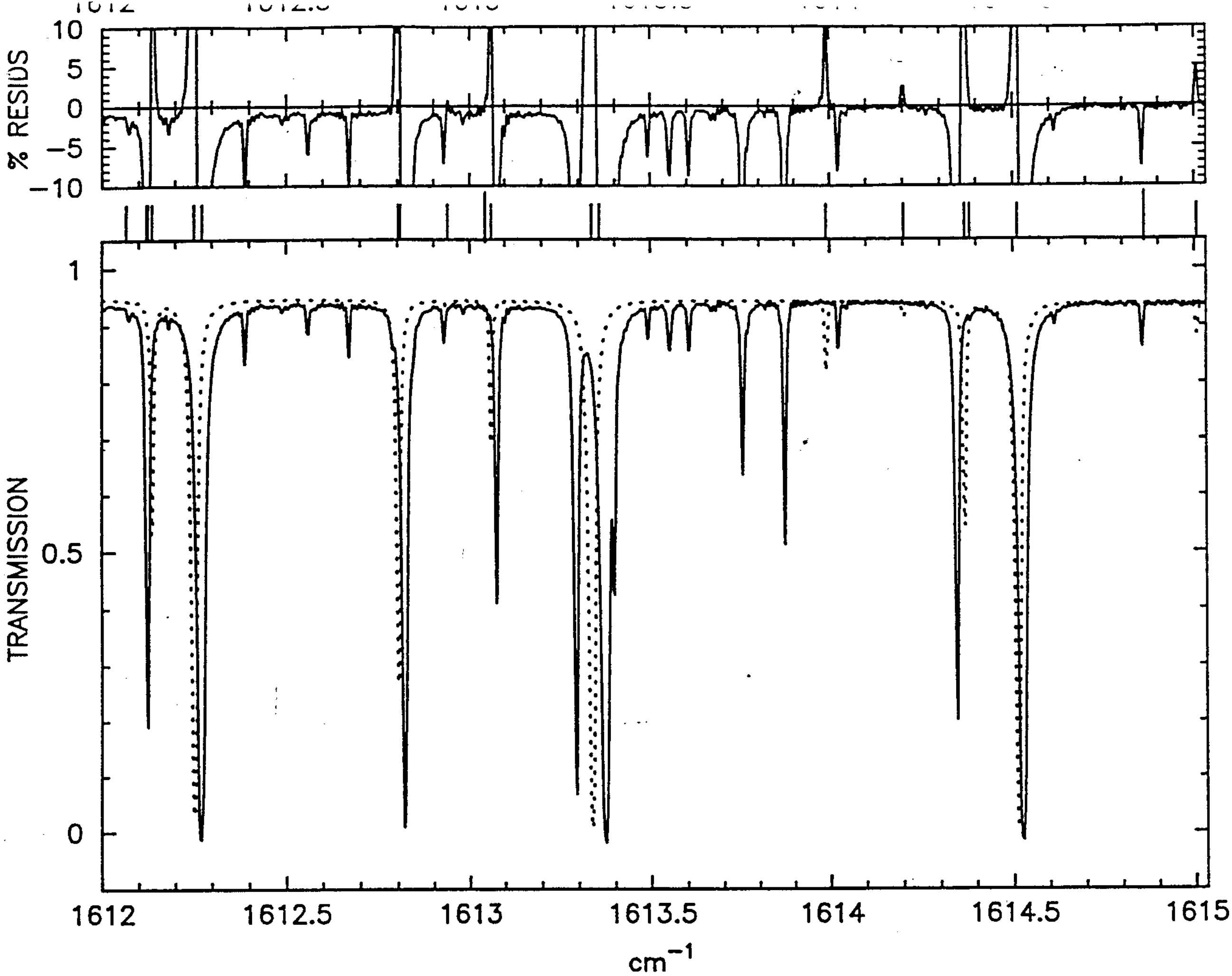
15
10
5
0
–5
–10
–15
–20
0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0
J" + 0.1K"
2ν2(a<-s)
qR
qQ
qP
(obs–calc)%
20
15
10
5
0
–5
–10
–15
–20
0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0
J" + 0.1K"

B



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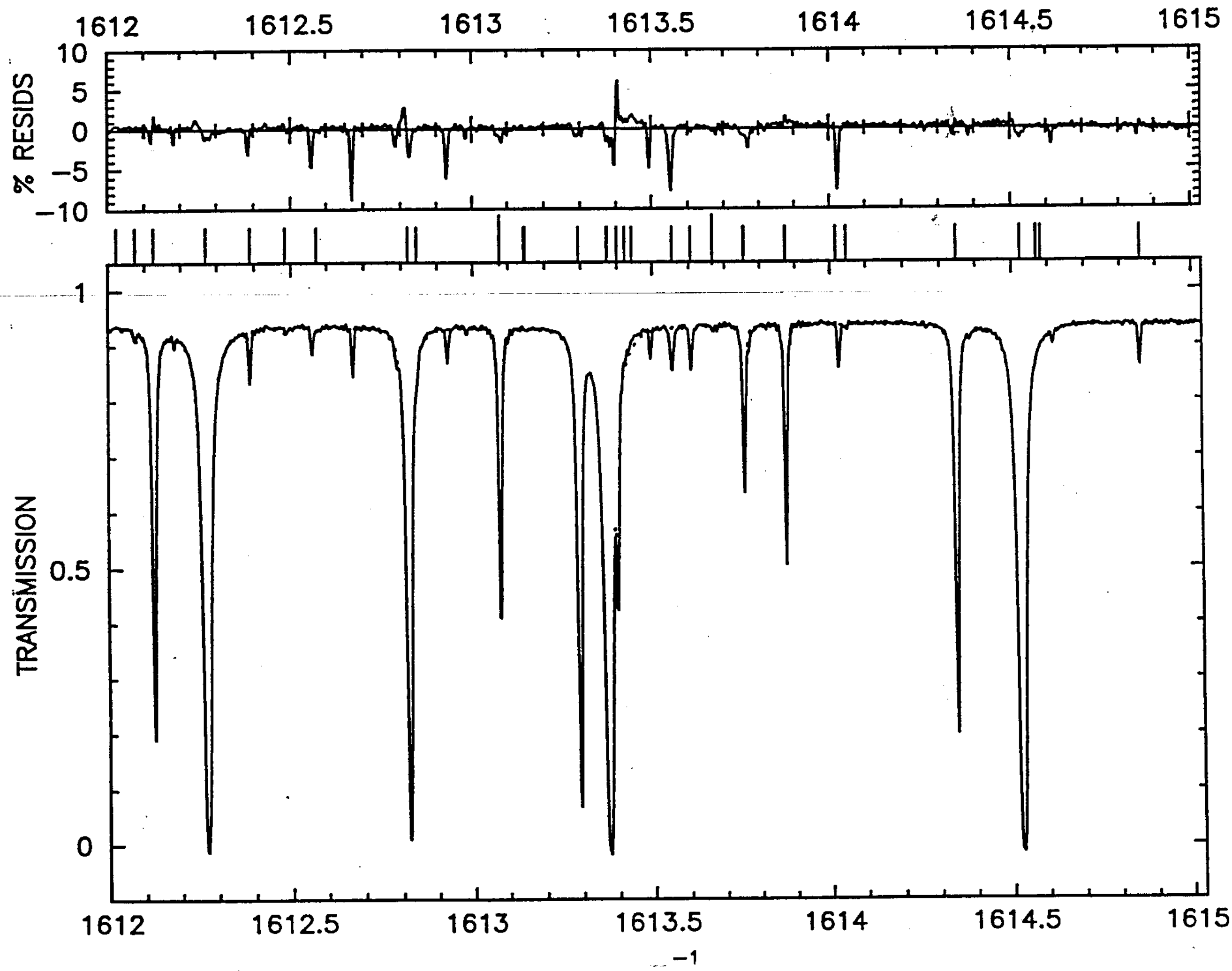
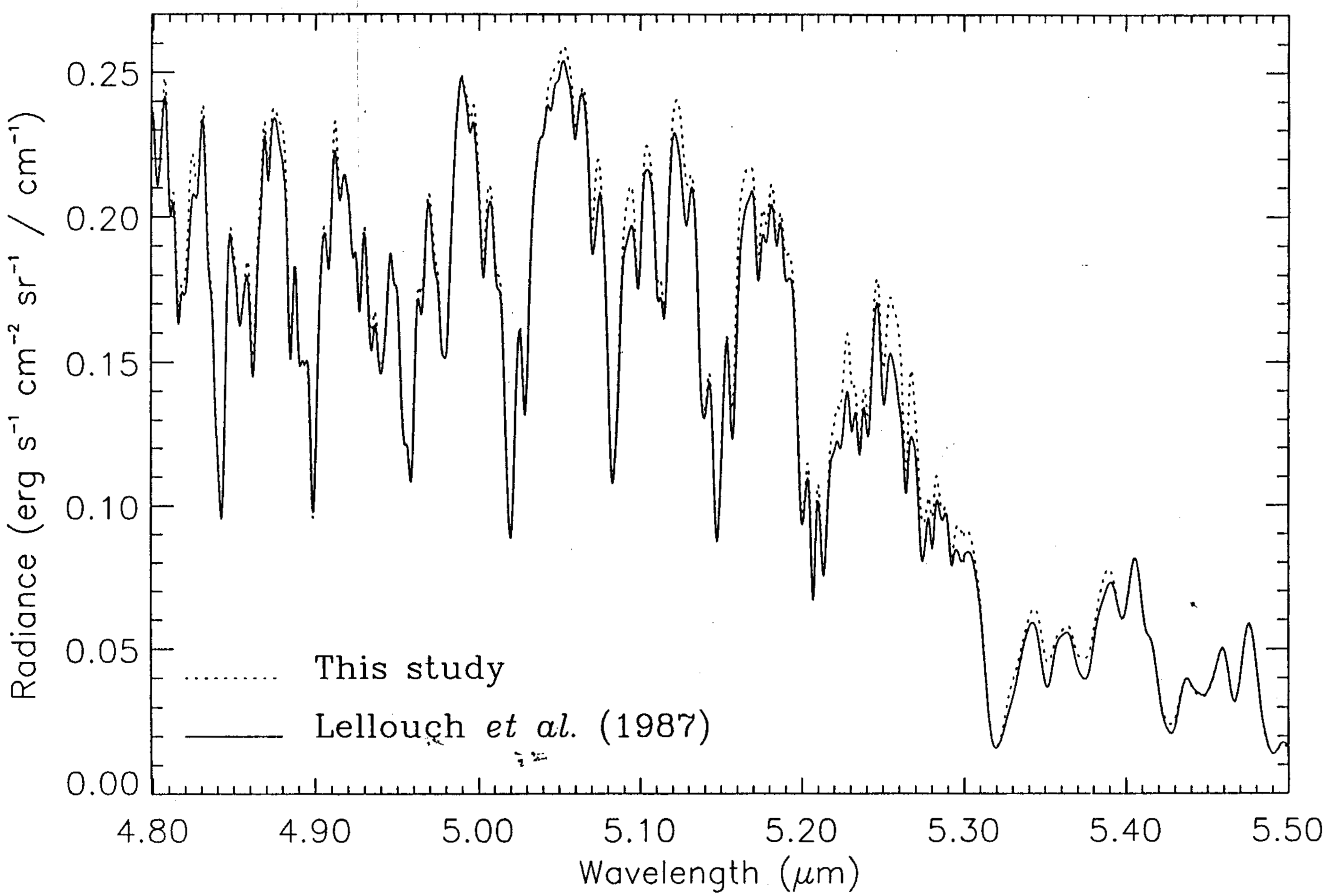
1614.5
1615
cm^{-1}



1612
1612.5
1613
1613.5
1614
1614.5
1615
10
5
0
−5
−10
% RESIDS
1
0.5
0
TRANSMISSION
1612
1612.5
1613
1613.5
1614
1614.5
1615
−1



0.25
0.20
0.15
0.10
0.05
0.00
Radiance (erg s^{-1} cm^{-2} sr^{-1} / cm^{-1})
This study
Lellouch et al. (1987)
4.80
4.90
5.00
5.10
5.20
5.30
5.40
5.50
Wavelength (μm)

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Appendix . Experimental Line Intensities in $2\nu_2$ and ν_4.

Table 1

Experimental Conditions of the Ammonia Spectra.

Press. Torr	Path m	Temp. K	Res. cm^{-1}
	a) Kitt Peak FTS 9 - 4 μm bandpass		
2.21	0.04	296.9	0.0053
4.91	0.04	296.7	0.0053
10.02	0.04	296.3	0.0053
6.27	0.25	299.3	0.0053
2.50	0.25	296.9	0.0053
5.49	0.25	296.9	0.0053
8.40	0.25	299.3	0.0053
10.90	0.25	296.4	0.0053
19.85	0.25	296.2	0.0053
11.73	8.35	295.0	0.0106
4.53	8.35	295.0	0.0106
9.96	24.40	295.0	0.0106
19.78	24.40	295.0	0.0106
	6 - 2 μm bandpass:		
2.60	1.50	294.6	0.0114
1.05	25.00	295.0	0.0114
6.20	25.00	297.7	0.0114
6.50	433.00	297.4	0.0114
	b) JPL BRUKER FTS 6 - 5 μm bandpass:		
9.61	0.10	296.3	0.006
1.80	0.80	295.8	0.006
2.60	0.80	296.2	0.006
5.30	0.80	295.7	0.006
15.2	0.80	296.0	0.006

Table 2

Sample of intensity measurements for NH_3 at 6 μm.

Position cm^{-1}	obs-av $10^{-3}.cm^{-1}$	Intensity cm^{-2}/atm	% ob-av	Path m	Press. Torr	Temp. K
1532.450173	-0.37	1.262	1.2	0.040	2.22	296.9
1532.450347	-0.20	1.232	-1.2	0.040	4.91	296.7
1532.451109	0.57	1.248	0.1	0.040	10.02	296.3
**1532.450543	0.41 **	1.248	1.0 **			
1494.242028	-0.08	1.086E-01	2.5	0.040	10.02	296.3
1494.242046	-0.06	1.070E-01	0.9	0.040	4.91	296.7
1494.242104	0.00	1.081E-01	2.0	0.250	2.50	296.9
1494.242110	0.00	1.103E-01	4.1	0.040	2.22	296.9
1494.242114	0.01	1.011E-01	-4.7	0.250	6.27	299.3
1494.242120	0.01	1.072E-01	1.2	0.250	5.49	296.9
1494.242139	0.03	9.759E-02	-7.9	0.250	8.40	299.3
1494.242147	0.04	1.070E-01	1.0	0.250	19.85	296.2
1494.242151	0.04	1.070E-01	0.9	0.250	10.90	296.4
**1494.242107	0.04 **	1.060E-01	3.6 **			
1596.895958	-0.24	5.592E-02	-4.3	0.102	9.60	296.0
1596.896059	-0.14	6.067E-02	3.8	0.040	2.22	296.9
1596.896157	-0.04	5.770E-02	-1.3	0.040	4.91	296.7
1596.896162	-0.04	5.898E-02	0.9	0.250	2.50	296.9
1596.896224	0.02	5.917E-02	1.2	0.250	5.49	296.9
1596.896325	0.13	5.798E-02	-0.8	0.250	10.90	296.4
1596.896325	0.13	5.803E-02	-0.7	0.250	19.85	296.2
1596.896385	0.19	5.919E-02	1.3	0.040	10.02	296.3
**1596.896199	0.14 **	5.845E-02	2.2 **			
1631.765631	-0.20	4.144E-03	0.6	0.80	1.80	296.0
1631.765641	-0.19	4.278E-03	3.9	0.80	2.60	296.0
1631.765731	-0.10	3.838E-03	-6.8	8.35	4.53	295.0
1631.765767	-0.06	4.008E-03	-2.7	0.80	15.22	296.0
1631.765771	-0.06	4.168E-03	1.2	0.80	5.30	296.0
1631.766018	0.19	4.014E-03	-2.5	0.250	19.85	296.2
1631.766037	0.21	4.158E-03	0.9	0.250	5.49	296.9
1631.766054	0.22	4.346E-03	5.5	0.250	10.90	296.4
**1631.765831	0.17 **	4.119E-03	3.7 **			
1871.342279	-0.34	8.238E-04	0.1	25.0	1.050	295.0
1871.342500	-0.12	8.035E-04	-2.3	8.35	4.530	295.0
1871.342646	0.02	8.323E-04	1.1	24.4	9.960	295.0
1871.342652	0.03	8.111E-04	-1.4	8.35	11.735	295.0
1871.343029	0.41	8.437E-04	2.5	24.4	19.780	295.0
**1871.342621	0.24 **	8.229E-04	1.7 **			
2029.664025	-0.32	1.767E-04	4.3	433.0	6.50	297.4
2029.664062	-0.28	1.667E-04	-1.6	25.0	6.20	297.7
2029.664087	-0.26	1.702E-04	0.5	24.4	9.96	295.0
2029.664662	0.32	1.635E-04	-3.5	8.35	11.74	295.0
2029.664891	0.55	1.700E-04	0.3	24.4	19.78	295.0
**2029.664345	0.36 **	1.694E-04	2.6 **			
2062.217767	-0.26	7.230E-05	2.7	24.4	9.96	295.0
2062.217980	-0.05	7.351E-05	4.4	433.0	6.50	297.4
2062.218025	-0.01	6.762E-05	-4.0	25.0	6.20	297.7
2062.218356	0.32	6.825E-05	-3.1	24.4	19.78	295.0
**2062.218032	0.21 **	7.042E-05	3.6 **			

** indicates the averaged values.
Individual and averaged intensities are in normal abundance at 296 K.

Table 3

Comparison of present NH_3 experimental line intensities to other studies.

	Urban et al. (15)	Lellouch et al.[+] (3)	Urban et al.[++] (16)	Aroui et al. (17)	Kralik et al. (18)
Instrument	TDL (NASA Langley)	FTS (Orsay)	FTS (Kitt Peak)	FTS (Bruker)	TDL
Spectral range (cm^{-1})	1581-1595	1800-2100	1485-1530	1474-1595	1793-1810
Type of transitions	^QQ of $2\nu_2$ (s←a) allowed of ν_4	allowed of $2\nu_2$ and ν_4	^OP and ^SP of ν_4	^PP of ν_4	R of ν_4
Number of line intensities reported	20	750	23	60	16
# lines in common with present study	16	294	12	51	16
mean intensity ratio (other/present)	1.007	0.969	0.134	0.970	0.822
rms of ratio (other/present)	6.8 %	10.2 %	127. %	9.1 %	14.5
range of ratio (other/present)	0.91 to 1.14	0.25 to 1.25	0.054 to 0.187	0.76 to 1.122	0.636 to 1.022

[+] Some 20 measurements of Lellouch et al. (3) differed by more than 25% from present values and were therefore omitted from consideration.

[++] If two measurements are excluded from the comparison, the mean ratio becomes 0.060 +/- 6.8% for Urban et al. (16) thus indicating some systematic problems with their reported values.

Table 4

Upper state energy matrix[a] for the $2\nu_2/\nu_4$ system of $^{14}NH_3$.

Diagonal[b, c]

$$\langle i, v, l_4 ; J,K \mid i, v, l_4 ; J,K\rangle = \nu_v^{\,i} + B_v^{\,i}\, J(J+1) + (C_v^{\,i} - B_v^{\,i})K^2 - D_v^{J,i}\, J^2(J+1)^2 - D_v^{JK,i}\, J(J+1)K^2$$
$$- D_v^{K,i}\, K^4 + H_v^{J,i}\, J^3(J+1)^3 + H_v^{JK,i}\, J^2(J+1)^2K^2 + H_v^{KJ,i}\, J(J+1)K^4 + H_v^{K,i}\, K^6 - 2(C\xi_4)_v^{\,i}\, Kl_4$$
$$+ \eta_v^{J,i}\, J(J+1)\, Kl_4 + \eta_v^{K,i}\, K^3 l_4 + \chi^{J,i}\, J^2(J+1)^2 Kl_4 + \chi^{JK,i}\, J(J+1)K^3 l_4 + \chi^{K,i}\, K^5 l_4$$

essential resonances[b, c]

$$\langle {}^{s}_{a}, v, l_4 ; J,K \mid {}^{a}_{s}, v, l_4 ; J,K\pm3\rangle = F_3^{\pm}(J,K)\, q_{3v}\, (2K\pm3)$$

$$\langle {}^{s}_{a}, 1, \pm1; J,K \mid {}^{a}_{s}, 1, \mp1; J, K\pm1\rangle = (2K\pm1)\, F_1^{\pm}(J,K)\, [q_1 + q_{1J}\, J(J+1) + q_{1K}\, (2K\pm1)^2]$$

$$\langle i, 1, \mp1; J,K \mid i, 1, \pm1 ; J, K\pm2\rangle = F_2^{\pm}(J,K)\, [q_2^{\,i} + q_{2J}^{\,i}\, J(J+1) + q_{2K}^{\,i}\, (2K\pm2)^2]$$
$$\langle i, 1, \pm1; J,K \mid i, 1, \mp1 ; J, K\pm4\rangle = F_4^{\pm}(J,K)\, f_4^{\,i}$$

Coriolis-type coupling[b, c]

$$\langle s, 2, 0, 0; J,K \mid a, 1, \pm1; J,K\pm1\rangle = F_1^{\pm}(J,K)\, [c_1^{\,s} + c_{1J}^{\,s}\, J(J+1) \mp c_{1K1}^{\,s}\, (2K\pm1) + c_{1K2}^{\,s}\, (2K\pm1)^2 + c_{1KJ}^{\,s}\, (2K\pm1)\, J(J+1)$$
$$\langle a, 2, 0, 0; J,K \mid s, 1, \pm1; J,K\pm1\rangle = F_1^{\pm}(J,K)\, [c_1^{\,a} + c_{1J}^{\,a}\, J(J+1) \mp c_{1K1}^{\,a}\, (2K\pm1) + c_{1K2}^{\,a}\, (2K\pm1)^2 + c_{1KJ}^{\,a}\, (2K\pm1)\, J(J+1$$
$$\langle i, 2, 0, 0; J,K \mid i, 1, \mp1; J,K\pm2\rangle = \pm F_2^{\pm}(J,K)\, [c_2^{\,i} + c_{2J}^{\,i}\, J(J+1) \pm c_{2K}^{\,i}\, (2K\pm2)]$$

$$F_1^{\pm}(J,K) = [J(J+1)-K(K\pm1)]^{1/2}\, ;\ F_2^{\pm}(J,K) = F_1^{\pm}(J,K)\, F_1^{\pm}(J,K\pm1)\, ; \ldots$$

---

[a] The elements are given according to the phase conventions of Ref. (36) and obey $\langle i', v' ; J, K' \mid i, v ; J, K\rangle = \langle i, v ; J, K \mid i', v' ; J, K'\rangle$. The quantum number M is omitted throughout the Table.

[b] The set $(2\nu_2, \nu_4)$ equal to (2,0) and (0,1) for the upper states of $2\nu_2$ and ν_4 respectively.

[c] In all elements $\langle i, \ldots \mid i, \ldots\rangle = \ldots$, the index i represents s or a.

Table 5

Statistics for Fitted Line Positions and Intensities[a].

	A) Fit of line positions[a]		B) Fit of the line intensities[a]	
	Number of lines	rms (cm^{-1})	Number of lines	rms (%)
$2\nu_2$	403	0.0031	254	4.1
s←a,s	262	0.0037	142	5.0
a←s,a	141	0.0014	112	3.0
ν_4	1663	0.0034	927	4.9
s←s,a	886	0.0030	501	5.0
a←a,s	777	0.0038	426	4.8
vibrationally mixed	48	0.0032	22	5.5
Global Fit	2114	0.0034	1203	4.7
Number of parameters	57		16	

[a]The results include for each band, all the transitions going up successively to "s" or "a" upper state components. The two inversion parities of the lower state indicate symmetry allowed (listed first) and "perturbation-allowed" (listed second) transitions respectively.

Table 6.a

Energy Parameters[a] (cm^{-1}) for the Ground State[b] and the ν_2[b], $2\nu_2$ and $3\nu_2$[c] Overtones of $^{14}NH_3$.

	GS (s)[b]	GS (a-s)[b]	ν_2 (s)[b]	ν_2 (a-s)[b]	$2\nu_2$ (s)	$2\nu_2$ (a-s)	$3\nu_2$ (s)[c]	$3\nu_2$ (a-s)[c]
1) diagonal								
ν	0.	0.79340312(95)	932.4338787(98)	35.6881062(32)	1597.470(27)	284.709(45)	2384.1477(57)	511.3652(69)
B_v	9.94664268(75)	-0.00503222(68)	10.07017463(94)	-0.18015883(52)	10.31255(30)	-0.63624(44)	9.49981(29)	-0.30293(25)
C_v	6.2275052(24)	0.00200029(17)	6.0883088(27)	0.0715169(14)	5.93597(16)	0.23464(34)	6.19169(39)	0.10411(28)
D_v^J $\times10^3$	0.849460(41)	-0.0167810(20)	1.130565(26)	-0.434232(21)	0.4800(27)	-0.2029(57)	-0.2639(42)	0.0086(19)
D_v^{JK} $\times10^3$	-1.578093(98)	0.0463532(50)	-2.422446(82)	1.189134(68)	-0.5722(64)	0.451(14)	1.282(10)	-0.0846(36)
D_v^K $\times10^3$	0.91383(11)	-0.0317569(41)	1.52044(11)	-0.806754(57)	0.1828(46)	-0.2137(89)	-0.9440(78)	0.1198(36)
H_v^J $\times10^6$	0.25914(51)	-0.038549(24)	0.55533(40)	-0.61772(38)	-0.644(12)	0.345(30)	-0.500(18)	fixed[d]
H_v^{JK} $\times10^5$	-0.09056(19)	0.0158387(73)	-0.22281(16)	0.24660(14)	0.2894(50)	-0.192(11)	0.1744(60)	fixed[d]
H_v^{KJ} $\times10^5$	0.10796(26)	-0.0214917(82)	0.29346(29)	-0.32402(21)	-0.4215(72)	0.288(14)	-0.2035(72)	fixed[d]
H_v^K $\times10^5$	-0.04151(20)	0.0096701(49)	-0.12455(21)	0.140103(92)	0.2035(33)	-0.1378(63)	0.0780(36)	fixed[d]
2) essential								
q_{3v} $\times10^3$	0.105(43)	0.	0.13266(11)	0.	-0.1496(26)	0.	-0.278(26)	0.

[a]The quoted errors represent three standard deviation. For each band, the column "s" and "a-s" give the value of ν^s, B_v^s, ... and ν^a-ν^s, B_v^a- B_v^s, ... respectively.

[b]Values determined in Ref. (8).

[c]Values determined in Ref. (4).

[d]Fixed to the ground state values determined in Ref. (8).

Table 6.5

Energy Parameters[a] (cm^{-1}) for the ν_4, $\nu_2+\nu_4$[b] and $2\nu_4$[c] of $^{14}NH_3$.

		ν_4 (s)	ν_4 (a-s)	$\nu_2+\nu_4$ (s)[b]	$\nu_2+\nu_4$ (a-s)[b]	$2\nu_4$ (s)[c]	$2\nu_4$ (a-s)[c]
1) diagonal							
ν		1626.2758(13)	1.0986(17)	2540.5287(33)	45.6030(48)	3228.42(18)	1.45(3)
B_v		10.184388(60)	-0.01774(18)	10.31504(12)	-0.21041(18)	10.413(1)	-0.0575(9)
C_v		6.169283(64)	0.00297(5)	6.01800(15)	0.090039(22)	6.099(2)	fixed[d]
D_v^J	$\times 10^3$	1.02494(75)	-0.02200(28)	1.3122(11)	-0.4593(14)	1.28(2)	fixed[d]
D_v^{JK}	$\times 10^3$	-1.9680(18)	0.0844(12)	-2.7747(69)	1.2625(87)	-2.54(6)	fixed[d]
D_v^K	$\times 10^3$	1.1270(12)	-0.06430(95)	1.6843(75)	-0.8674(78)	1.45(3)	fixed[d]
H_v^J	$\times 10^6$	0.3547(19)	fixed[d]	Fixed[d]	fixed[d]	fixed[d]	fixed[d]
H_v^{JK}	$\times 10^5$	-0.1205(11)	fixed[d]	Fixed[d]	fixed[d]	fixed[d]	fixed[d]
H_v^{KJ}	$\times 10^5$	0.1406(15)	fixed[d]	Fixed[d]	fixed[d]	fixed[d]	fixed[d]
H_v^K	$\times 10^5$	-0.05407(76)	fixed[d]	Fixed[d]	fixed[d]	fixed[d]	fixed[d]
$(C\zeta_4)_v$		-1.51999(10)	0.	-1.30276(51)	-0.18416(48)	-1.373(2)	-0.033(3)
η_v^J	$\times 10^2$	-0.25682(94)	0.	-0.2111(30)	-0.1527(19)	0.	0.28(2)
η_v^K	$\times 10^2$	0.20326(94)	0.	0.1184(33)	0.1964(26)	0.	-0.37(2)
2) essential							
q_{3v}	$\times 10^3$	0.1465(36)	-	-0.2258(33)	-	fixed[d]	0.
q_1	$\times 10^1$	-1.2282(15)	-	1.1074(26)	-	0.137(6)	
q_{1J}	$\times 10^4$	0.8753(58)	-	-1.316(26)	-	0.	0.
q_{1K}	$\times 10^5$	-1.957(20)	-	6.36(44)	-	0.	0.
q_2	$\times 10^1$	1.54214(36)	-0.1028(16)	1.24686(90)	0.17438(78)	0.827(6)	0.156(3)
q_{2J}	$\times 10^4$	-0.7988(30)	0.	-0.8220(84)	0.	-0.93(6)	
q_{2K}	$\times 10^4$	0.	0.	-0.632(34)	0.		-0.21(6)
f_4	$\times 10^5$	1.729(26)	0.	1.718(66)	0.44(10)		

[a]The quoted errors represent three standard deviation. For each band, the column "s" and "a-s" give the value of ν^s, B_v^s, ... and ν^a-ν^s, B_v^a- B_v^s, ... respectively.

[b]Values determined in Ref. (4).

[c]Values determined in Ref. (5).

[d]Fixed to the ground state values determined in Ref. (8).

Table 6.c

Coriolis Energy Parameters[a] (cm^{-1}) for the $2\nu_2/\nu_4$ and $3\nu_2/\nu_2+\nu_4$[b] Systems of $^{14}NH_3$.

		$2\nu_2/\nu_4$ (s)	$2\nu_2/\nu_4$ (a-s)	$3\nu_2/\nu_4$ [b] (s)	$3\nu_2/\nu_4$ [b] (a-s)
3) Coriolis					
C_1		-1.352(19)	0.	-	-
C_{1K1}	$\times 10^2$	-0.723(15)	1.389(22)	-	-
C_{1K2}	$\times 10^3$	-0.6181(38)	0.	-	-
C_{1J}	$\times 10^3$	1.3683(50)	0.	-	-
C_{1JK}	$\times 10^5$	-0.618(29)	0.	-	
C_2	$\times 10^2$	2.006(17)	-1.270(42)	1.158(66)	0.
C_{2J}	$\times 10^5$	-0.95(13)	0.	-	-

[a]The quoted errors represent three standard deviation. For each band, the column "s" and "a-s" give the value of ν^s, B_v^s, ... and $\nu^a-\nu^s$, $B_v^a- B_v^s$, ... respectively.
[b]values determined in Ref. (4).

Table 7

Statistics for Fitted perturbation-allowed transitions for the $2\nu_2$ and ν_4 System.

Bands	Perturbation-allowed Transitions	Notation[a]	Number of Line Positions (Intensities) Fitted	RMS Position (cm^{-1})	RMS Intensity (%)
ν_4	$\Delta K = \pm 2$ a←s, s←a	"O" , "S"	667 (239)	0.0023	6.5
$2\nu_2$	$\Delta K = \pm 3$ a←a, s←s	"N" , "T"	65 (11)	0.0025	7.0
ν_4	$\Delta K = 0$ a←s, s←a	"Q"	59 (19)	0.0025	6.5
$2\nu_2$	$\Delta K = \pm 1$ a←a, s←s	"R" , "P"	16 (3)	0.0029	7.2

[a] the notation O, S, N, T, Q, P and R is related to the variation of the K quantum number : O stands for $\Delta K = -2$, S for $\Delta K = +2$, N for $\Delta K = -3$, T for $\Delta K = +3$, Q for $\Delta K = 0$, P for $\Delta K = -1$ and R for $\Delta K = +1$.

Table 8

Intensity Parameters[1] (D) for the $2\nu_2/\nu_4$ System of $^{14}NH_3$.

		$2\nu_2$		ν_4
		d^s	$d^a - d^s$	$d^s = d^a$ [2]
d_0		0.004605(50)	0.02419(30)	
d_{01}	$\times 10^3$	-0.300(14)	-0.662(38)	
d_{02}	$\times 10^4$	-0.167(17)	0. [2]	
d_{03}	$\times 10^4$	-0.175(14)	-0.280(54)	
d_{04}	$\times 10^4$	0.255(19)	0.516(96)	
d_1				0.08408(34)
d_{11}	$\times 10^2$			-0.5782(37)
d_{12}	$\times 10^2$			0.2609(23)
d_{15}	$\times 10^4$			0.143(18)
d_{16}	$\times 10^4$			-0.331(26)
d_{17}	$\times 10^2$			-0.1100(13)
d_{18}	$\times 10^4$			-0.148(19)

[1] d_0^s, d_{01}^s, d_1^s, ... are related to transitions from ground state *s* levels ; d_0^a, d_{01}^a, d_1^a, ... are related to transitions from ground state *a* levels. The signs of intensity parameters are correlated to those of the energy parameters given in Table IV in Ref. (4). The quoted errors represent three standard deviation.

[2] The differences d^a-d^s were not found to be significant and were set to zero.

Table 9

Bandstrengths in (cm^{-2} atm^{-1}) for the $2\nu_2/\nu_4$ Bands of $^{14}NH_3$ at 296 K.

	Number of transitions[1]	F_{min}[1]	F_{max}[1]	Band Centers (cm^{-1})	Bandstrengths S_v (int)[2]	(present work) S_v^o
S_v^s ($2\nu_2$ a←s)	284	1402.924	2134.438	1882.179(5)	0.145(7)	0.201(5)
S_v^a ($2\nu_2$ s←a)	598	1272.381	1949.798	1597.470(3)	7.2(4)	6.68(24)
S_v (ν_4 s←s)	1345	1253.847	2035.501	1626.276(1)	57.(3)	116.(3)[3]
S_v (ν_4 a←a)	1216	1256.098	2019.033	1627.375(2)	52.(3)	
vibrational mixed	249	1335.398	1977.357		0.55(3)	
Total	3692	1253.847	2134.438		117(6)	123 (3)

[1]Number of transitions and frequency limits used to calculate the integrated vibrational bandstrength S_v (int).

[2]S_v (int) : integrated vibrational bandstrength $\sum_i S_i$ with 5 % of precision.

[3]$S_v = (S_v^s + S_v^a)$.

Table 10

Comparison of Transition dipole moment matrix elements (Debye) from the present work and from the literature for the $2\nu_2^s$, $2\nu_2^a$ and ν_4 bands of $^{14}NH_3$.

	$\langle 0^s, 0^0 \mid \mu_z \mid 2^a, 0^0 \rangle$	$\langle 0^a, 0^0 \mid \mu_z \mid 2^s, 0^0 \rangle$	$\langle 0^i, 0^0 \mid \mu_x \mid 0^0, 1_{\pm}^1 \rangle$
High Resolution Measurements:			
Present work (1203 lines)	0.003256(35)	0.02036(25)	0.04203(17)
Urban et al. (15)[1] (40 lines)		0.02261(21)	0.04247(84)
Aroui et al. (17) (57 lines)		-	0.0420(15) ν_4^s
			0.0394(21) ν_4^a
Calculations:			
Pracna et al. (33)[2]	0.007	0.027	0.044(1)[3]
Urban et al. (15)[4]	-0.031(16)		

[1] Observed values correspond to fit I (best fit) in Table IV of Ref. (15).

[2] ab initio values from Tables III or VIII of Ref. (33).

[3] from Tables II of Ref. (33).

[4] Calculated value inferred from fit I in Table IV of Ref. (15).

Table 11

Comparison of Bandstrengths (S_v°) from the present work and from literature (in $cm^{-2}atm^{-1}$) for the $2\nu_2^s$, $2\nu_2^a$ and ν_4 bands of $^{14}NH_3$ at 296 K.

		$2\nu_2$ (a←s)	$2\nu_2$ (s←a)	ν_4
Present work [1]	1203 lines	0.201(5)	6.68(24)	116 (3)
Urban et al (15,16) [2]	40 lines	-	8.24(31)	118 (7)
Aroui et al. (17)	57 lines	-	-	110.3 (8.5)
low resolution studies [3]		-	-	116 (15)
Average				115.1 (3)

[1] Calculated from Eq. (7) of this paper.

[2] Calculated from the transition dipole moments of Table IV of Ref. (15) ; referred as fits I.

[3] Average value of Ref. Kim (19), Koops et al. (20), France and William (21) and Mc Kean and Schatz (22).

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(R)P (13,A+, 9,a) 12 A+ A2o	2 a10 1	nu4	1333.00637	-4.1	1.18E-04	0.2	-8.3	3
(R)P (14,E , 8,s) 13 E Eo	9 s 9 1	nu4	1335.21296	-0.5	4.54E-05	2.7	-9.2	2
(Q)P (13,E ,10,a) 12 E Ee	4 s10 0	2nu2	1337.27034	-5.9	1.14E-04	1.8	15.5	3
(Q)P (12,E ,10,a) 11 E Ee	2 s10 0	2nu2	1346.65727	-1.4	2.21E-04	3.4	1.5	4
(R)P (13,E , 8,s) 12 E Eo	7 s 9 1	nu4	1348.49562	0.2	1.47E-04	2.3	-2.0	3
(Q)P (13,A+, 9,a) 12 A+ A2o	3 s 9 0	2nu2	1350.30041	5.9	1.21E-04	2.1	-15.2	3
(R)P (12,A+, 9,s) 11 A+ A2e	2 s10 1	nu4	1351.33503	0.7	6.11E-04	2.3	2.3	4
(R)P (13,E , 7,a) 12 E Eo	8 a 8 1	nu4	1352.52761	-3.5	1.08E-04	1.6	4.5	3
(Q)P (11,E ,10,a) 10 E Ee	1 s10 0	2nu2	1353.60322	1.1	2.37E-04	2.0	17.5	4
**(S)P (8,E , 5,a) 7 E Eo	2 s 7-1	nu4	1356.30491	3.9	6.36E-05	0.0	-6.9	2
(R)P (13,E , 7,s) 12 E Ee	10 s 8 1	nu4	1357.29514	0.5	1.34E-04	3.1	-1.6	3
(Q)P (12,A-, 9,a) 11 A- A2o	3 s 9 0	2nu2	1360.46526	-4.5	4.60E-04	2.0	-2.4	4
(R)P (11,A-, 9,s) 10 A- A2e	1 s10 1	nu4	1364.50681	-3.3	7.95E-04	1.8	8.1	4
(R)P (13,A+, 6,s) 12 A+ A2o	6 s 7 1	nu4	1364.89273	0.1	2.05E-04	2.4	-12.0	2
(R)P (13,E , 5,a) 12 E Eo	13 a 6 1	nu4	1367.89247	4.1	1.08E-04	2.3	5.8	3
**(S)P (10,A-, 3,a) 9 A- A2o	4 s 5-1	nu4	1370.33408	-2.1	4.63E-04	1.7	15.7	4
(Q)P (11,A+, 9,a) 10 A+ A2o	2 s 9 0	2nu2	1370.81226	-0.9	1.00E-03	1.6	3.9	4
(R)P (12,E , 7,s) 11 E Ee	7 s 8 1	nu4	1371.25546	0.6	3.82E-04	2.2	-0.4	4
(P)P (16,E ,16,s) 15 E Eo	1 s15-1	nu4	1371.66895	-4.1	1.31E-03	1.0	-4.3	3
(P)P (16,E ,16,a) 15 E Ee	1 a15-1	nu4	1371.79708	4.3	1.32E-03	1.3	-2.6	3
(P)P (16,A+,15,s) 15 A+ A2e	1 s14-1	nu4	1374.62869	-0.1	1.52E-03	0.9	-3.7	4
(P)P (16,A-,15,a) 15 A- A2o	2 a14-1	nu4	1375.23178	-1.1	1.44E-03	1.9	-11.0	2
(R)P (11,E , 8,s) 10 E Eo	3 s 9 1	nu4	1375.60412	0.6	7.17E-04	3.6	4.0	3
(P)P (16,E ,14,s) 15 E Eo	5 s13-1	nu4	1377.32292	4.0	4.62E-04	2.3	-3.5	4
(Q)P (10,A-, 9,a) 9 A- A2o	1 s 9 0	2nu2	1378.24035	1.0	8.76E-04	1.7	13.9	4
(P)P (16,E ,14,a) 15 E Ee	5 a13-1	nu4	1378.48328	-3.9	5.67E-04	3.9	13.0	3
(R)P (11,E , 7,a) 10 E Ee	4 a 8 1	nu4	1378.99796	-1.8	3.09E-04	2.1	5.7	4
(R)P (12,A-, 6,s) 11 A- A2o	5 s 7 1	nu4	1379.36016	0.5	6.48E-04	2.5	-9.9	4
(R)P (12,E , 5,a) 11 E Eo	11 a 6 1	nu4	1381.39772	-1.1	2.64E-04	3.0	-2.4	4
(Q)P (12,E , 7,a) 11 E Eo	7 s 7 0	2nu2	1382.15339	1.8	9.25E-05	4.0	-15.9	3
**(S)P (11,E , 2,s) 10 E Eo	12 a 4-1	nu4	1382.83094	-1.4	1.22E-04	2.5	14.7	3
(Q)P (11,E , 8,a) 10 E Ee	5 s 8 0	2nu2	1383.38753	-3.4	5.56E-04	0.2	-0.5	4
(P)P (16,A+,12,a) 15 A+ A2e	5 a11-1	nu4	1384.00593	-9.5	3.90E-04	1.6	-11.3	4
**(S)P (9,A+, 3,a) 8 A+ A2o	3 s 5-1	nu4	1384.67670	-1.7	7.34E-04	1.5	15.4	4
(R)P (11,E , 7,s) 10 E Ee	6 s 8 1	nu4	1385.39980	1.0	8.85E-04	1.9	1.0	4
(R)P (12,E , 5,s) 11 E Ee	11 s 6 1	nu4	1386.30367	1.1	2.83E-04	1.5	-6.1	4
(R)P (11,A-, 6,a) 10 A- A2e	3 a 7 1	nu4	1387.39271	-2.3	7.59E-04	2.7	-13.2	2
(P)P (15,A-,15,s) 14 A- A2e	1 s14-1	nu4	1387.91773	0.5	7.19E-03	0.0	5.4	2
(P)P (15,A+,15,a) 14 A+ A2o	1 a14-1	nu4	1388.05461	0.0	7.47E-03	4.7	9.5	2
(R)P (10,E , 8,s) 9 E Eo	2 s 9 1	nu4	1389.55690	-2.3	8.49E-04	0.9	8.7	4
(P)P (15,E ,14,s) 14 E Eo	3 s13-1	nu4	1390.43695	-1.1	2.00E-03	1.3	-1.4	4
(R)P (12,E , 4,s) 11 E Eo	13 s 5 1	nu4	1392.10369	2.1	2.04E-04	1.9	-10.8	4
(P)P (15,E ,13,s) 14 E Ee	4 s12-1	nu4	1392.69715	0.0	1.25E-03	1.2	-2.6	3
(Q)P (10,E , 7,a) 9 E Eo	3 s 7 0	2nu2	1393.26236	-0.7	2.24E-04	2.3	4.0	4
(R)P (12,A-, 3,a) 11 A- A2o	7 a 4 1	nu4	1393.34869	1.2	4.36E-04	2.0	-14.2	4
(P)P (15,E ,13,a) 14 E Eo	4 a12-1	nu4	1393.83423	-1.9	1.25E-03	1.8	-5.0	4
(Q)P (11,E , 7,a) 10 E Eo	5 s 7 0	2nu2	1393.90101	-2.0	4.50E-04	2.8	-5.4	3
(R)P (11,A+, 6,s) 10 A+ A2o	4 s 7 1	nu4	1393.98230	0.8	1.78E-03	2.4	-4.7	5
(P)P (15,A+,12,s) 14 A+ A2o	3 s11-1	nu4	1394.71980	2.1	1.63E-03	1.1	-3.2	2
**(S)P (11,E , 1,a) 10 E Eo	13 s 3-1	nu4	1398.32330	1.4	1.39E-04	1.6	8.1	2
**(S)P (8,A-, 3,a) 7 A- A2o	2 s 5-1	nu4	1399.75307	-1.4	9.03E-04	1.7	12.7	4
(R)P (10,E , 7,s) 9 E Ee	4 s 8 1	nu4	1399.78732	-1.0	1.58E-03	1.9	4.2	4
(R)P (12,E , 2,s) 11 E Eo	16 s 3 1	nu4	1400.14568	2.3	5.77E-05	0.0	-4.2	2
(P)P (15,E , 8,s) 14 E Eo	13 s 7-1	nu4	1400.71228	0.6	2.19E-04	3.1	-11.3	4
(Q)P (10,A+, 6,a) 9 A+ A2e	2 s 6 0	2nu2	1401.37752	-1.8	9.70E-04	1.7	-1.5	4
(R)P (11,E , 5,s) 10 E Ee	9 s 6 1	nu4	1401.40754	0.8	8.47E-04	4.0	-3.1	4
(R)P (11,E , 4,s) 10 E Ee	10 a 5 1	nu4	1401.45160	-1.7	5.83E-04	1.6	-2.7	4
(P)P (15,E ,10,a) 14 E Ee	10 a 9-1	nu4	1401.55515	-2.3	4.06E-04	2.4	-10.7	4
(P)P (15,E , 7,s) 14 E Ee	16 s 6-1	nu4	1401.69611	-5.2	1.70E-04	3.1	-15.2	3
(P)P (14,E ,14,s) 13 E Ee	2 s13-1	nu4	1404.14629	2.4	9.10E-03	0.9	12.5	3
**(S)P (11,E , 1,s) 10 E Ee	14 a 3-1	nu4	1404.50112	-3.3	9.97E-05	4.2	-6.8	2
**(S)P (9,E , 2,a) 8 E Ee	8 s 4-1	nu4	1405.47071	-1.0	4.98E-04	3.2	14.1	3
(R)P (10,E , 7,a) 9 E Eo	4 a 8 1	nu4	1406.11989	-1.8	1.27E-03	3.2	-1.3	5
(P)P (14,E ,13,s) 13 E Ee	2 s12-1	nu4	1406.22035	-1.1	5.02E-03	3.7	2.0	5
(P)P (14,E ,13,a) 13 E Eo	3 a12-1	nu4	1406.81404	-1.4	5.21E-03	0.1	4.2	2
(R)P (11,A+, 3,a) 10 A+ A2o	6 a 4 1	nu4	1407.02227	-3.8	1.13E-03	3.5	-11.0	3
**(S)P (12,A+, 0,a) 11 A+ A2e	10 s 2-1	nu4	1407.46115	-4.5	6.34E-04	3.0	-1.2	4
(R)P (11,E , 4,s) 10 E Eo	11 s 5 1	nu4	1407.69356	1.5	6.93E-04	1.0	-4.6	3
(P)P (14,A-,12,s) 13 A- A2o	2 s11-1	nu4	1408.03473	-2.2	6.20E-03	3.2	-3.1	4
(R)P (10,A-, 6,s) 9 A- A2o	3 s 7 1	nu4	1408.80464	1.1	3.92E-03	1.9	-0.6	6
(P)P (14,E ,11,s) 13 E Ee	6 s10-1	nu4	1409.60723	-1.6	2.03E-03	3.9	-7.2	5
(P)P (14,E ,10,s) 13 E Eo	8 s 9-1	nu4	1410.95182	-0.2	1.51E-03	3.1	-2.3	4
(P)P (14,E ,11,a) 13 E Eo	7 a10-1	nu4	1411.34411	-0.1	2.22E-03	3.0	-2.5	4
**(S)P (10,E , 1,a) 9 E Eo	11 s 3-1	nu4	1411.65447	0.7	3.25E-04	2.2	13.7	2
(R)P (11,A-, 3,s) 10 A- A2e	7 s 4 1	nu4	1412.79824	0.5	9.51E-04	1.2	-8.5	3
(P)P (14,E , 8,s) 13 E Eo	11 s 7-1	nu4	1412.99684	1.1	8.15E-04	2.0	-8.7	3
(P)P (14,E ,10,a) 13 E Ee	8 a 9-1	nu4	1413.43148	-0.6	1.54E-03	1.2	-6.9	3
(P)P (14,E , 7,s) 13 E Ee	14 s 6-1	nu4	1413.70529	0.2	6.38E-04	1.5	-11.3	3
(P)P (14,A-, 6,s) 13 A- A2o	8 s 5-1	nu4	1414.18487	-2.5	1.03E-03	1.9	-13.3	5
(P)P (14,E , 5,s) 13 E Ee	18 s 4-1	nu4	1414.31930	-12.7	4.25E-04	3.3	-14.6	4
(R)P (9,E , 7,s) 8 E Ee	2 s 8 1	nu4	1414.48681	-1.1	1.70E-03	2.1	8.0	5
(R)P (10,A+, 6,a) 9 A+ A2e	3 a 7 1	nu4	1415.47434	-1.4	2.06E-03	2.4	-16.5	3
**(S)P (7,A+, 3,a) 6 A+ A2o	1 s 5-1	nu4	1415.55921	-0.1	8.37E-04	3.2	13.3	4
(P)P (14,E , 2,s) 13 E Eo	24 s 1-1	nu4	1416.39877	34.7	3.70E-04	3.4	-14.2	4
(R)P (11,E , 2,s) 10 E Eo	14 s 3 1	nu4	1416.61704	2.4	2.18E-04	1.9	-12.2	2

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(R)P (10,E , 5,s) 9 E Ee	7 s 6 1	nu4	1416.67691	0.9	2.05E-03	4.1	-4.1	2
**(U)P (9,A+, 0,s) 8 A+ A2o	5 a 4 1	nu4	1416.94570	1.5	3.67E-04	0.8	-1.9	3
(R)P (9,E , 7,a) 8 E Eo	2 a 8 1	nu4	1418.53966	1.4	2.08E-03	2.4	1.6	4
(P)P (13,E ,13,s) 12 E Ee	1 s12-1	nu4	1420.34915	3.2	1.79E-02	3.1	2.6	7
(Q)P (10,A-, 3,a) 9 A- A2o	5 s 3 0	2nu2	1420.45939	0.5	2.27E-03	3.8	5.4	2
(P)P (13,E ,13,a) 12 E Eo	1 a12-1	nu4	1420.50949	-2.5	1.76E-02	3.4	1.1	7
(P)P (13,A+,12,s) 12 A+ A2o	1 s11-1	nu4	1421.97053	-1.0	2.34E-02	3.8	4.6	8
(P)P (13,A-,12,a) 12 A- A2e	2 a11-1	nu4	1422.56124	-0.7	2.34E-02	3.0	3.2	8
**(*)P (10,E , 5,a) 9 E Eo	8 * * *	**	1423.03959	0.0	7.90E-04	4.0	-15.3	3
(P)P (13,E ,11,s) 12 E Ee	5 s10-1	nu4	1423.32803	-2.6	7.95E-03	3.4	5.8	5
(R)P (10,E , 4,s) 9 E Eo	9 s 5 1	nu4	1423.43096	0.8	2.15E-03	3.3	7.3	2
(R)P (9,A+, 6,s) 8 A+ A2o	2 s 7 1	nu4	1423.88726	0.9	6.48E-03	2.0	3.1	3
(Q)P (10,E , 2,a) 9 E Ee	11 s 2 0	2nu2	1424.61529	-0.3	1.07E-03	0.7	-5.2	3
(P)P (13,A-, 9,s) 12 A- A2e	4 s 8-1	nu4	1425.30220	-1.7	7.76E-03	3.4	0.9	6
(P)P (13,E , 8,s) 12 E Eo	10 s 7-1	nu4	1425.93935	-1.1	3.00E-03	3.7	2.0	6
(Q)P (8,E , 7,a) 7 E Eo	1 s 7 0	2nu2	1426.06499	0.1	1.36E-03	2.2	10.1	3
(P)P (13,E ,10,a) 12 E Ee	6 a 9-1	nu4	1426.13821	1.3	5.27E-03	3.8	-4.3	6
(P)P (13,E , 7,s) 12 E Ee	12 s 6-1	nu4	1426.35586	0.2	2.20E-03	3.2	-6.3	6
(P)P (13,E , 5,s) 12 E Ee	16 s 4-1	nu4	1426.49518	-1.4	1.43E-03	1.5	-14.2	3
(P)P (13,A+, 6,s) 12 A+ A2o	7 s 5-1	nu4	1426.55231	0.2	3.43E-03	1.8	-12.4	6
(P)P (13,E , 2,s) 12 E Eo	22 s 1-1	nu4	1427.12621	17.0	1.16E-03	0.7	-17.6	3
(Q)P (10,E , 1,a) 9 E Eo	13 s 1 0	2nu2	1427.41814	0.6	1.17E-03	3.7	-2.4	3
(P)P (13,A+, 9,a) 12 A+ A2o	5 a 8-1	nu4	1427.73729	1.3	8.25E-03	3.0	0.9	5
(Q)P (10,A+, 0,a) 9 A+ A2e	7 s 0 0	2nu2	1428.27832	0.6	1.94E-03	1.2	2.7	2
(R)P (9,A-, 6,a) 8 A- A2e	3 a 7 1	nu4	1428.78458	-0.3	5.55E-03	3.9	-2.2	6
(P)P (13,A-, 3,s) 12 A- A2e	11 s 2-1	nu4	1428.85088	2.4	2.47E-03	2.0	-14.4	4
(R)P (10,A+, 3,s) 9 A+ A2e	6 s 4 1	nu4	1429.03841	1.1	2.94E-03	2.3	-6.2	4
(R)P (10,E , 2,s) 9 E Eo	12 s 3 1	nu4	1433.31677	-0.4	7.86E-04	1.2	-10.0	3
(P)P (13,E , 5,a) 12 E Eo	16 a 4-1	nu4	1433.55328	1.8	1.53E-03	2.7	-11.7	3
**(S)P (6,A+, 3,s) 5 A+ A2e	1 a 5-1	nu4	1433.77473	-4.2	4.33E-04	3.7	8.1	3
(Q)P (9,A+, 3,a) 8 A+ A2o	4 s 3 0	2nu2	1434.33212	1.8	2.67E-03	3.9	0.1	7
(P)P (12,A-,12,s) 11 A- A2o	1 s11-1	nu4	1436.52041	4.2	7.38E-02	1.2	2.7	2
(P)P (12,A+,12,a) 11 A+ A2e	1 a11-1	nu4	1436.69081	-3.4	7.00E-02	2.1	-2.0	2
(P)P (12,E ,11,s) 11 E Ee	3 s10-1	nu4	1437.67996	-0.5	2.41E-02	3.9	1.7	8
(Q)P (9,E , 2,a) 8 E Ee	9 s 2 0	2nu2	1438.15472	2.9	1.48E-03	1.8	0.1	3
(P)P (12,E ,11,a) 11 E Eo	3 a10-1	nu4	1438.26655	-1.1	2.43E-02	3.6	1.2	5
(P)P (12,E , 2,s) 11 E Eo	20 s 1-1	nu4	1438.47729	4.9	3.83E-03	3.4	-4.3	5
(P)P (12,A+, 9,s) 11 A+ A2e	3 s 8-1	nu4	1439.19211	-2.9	2.49E-02	2.7	4.8	6
(P)P (12,E , 5,s) 11 E Ee	14 s 4-1	nu4	1439.24392	0.8	4.72E-03	3.7	-3.3	4
(P)P (12,A+, 3,s) 11 A+ A2e	10 s 2-1	nu4	1439.28398	-4.1	6.06E-03	2.4	-6.1	5
(R)P (8,A-, 6,s) 7 A- A2o	1 s 7 1	nu4	1439.29972	-0.9	6.73E-03	3.5	10.4	5
(R)P (9,E , 4,s) 8 E Eo	7 s 5 1	nu4	1439.33696	0.2	4.46E-03	1.8	-2.9	4
(P)P (12,A-, 6,s) 11 A- A2o	6 s 5-1	nu4	1439.58253	0.1	1.17E-02	3.5	1.4	6
(P)P (12,E ,10,a) 11 E Ee	4 a 9-1	nu4	1439.64711	1.1	1.69E-02	3.7	-0.1	6
(P)P (12,E , 7,s) 11 E Ee	10 s 6-1	nu4	1439.68987	-1.0	7.10E-03	3.3	1.1	5
**(S)Q (11,A+, 9,a) 11 A- A2o	1 s11-1	nu4	1440.01494	3.6	3.96E-04	3.3	3.5	3
**(S)P (8,E , 1,a) 7 E Eo	8 s 3-1	nu4	1440.64407	0.2	9.59E-04	1.3	11.5	2
(Q)P (9,E , 1,a) 8 E Eo	11 s 1 0	2nu2	1440.66291	6.7	1.54E-03	1.4	-5.8	4
(P)P (12,A-, 9,a) 11 A- A2o	4 a 8-1	nu4	1440.86381	2.0	2.57E-02	2.8	3.6	7
(P)P (12,E , 8,a) 11 E Ee	9 a 7-1	nu4	1441.95554	2.1	9.41E-03	3.7	-1.1	6
(R)P (8,A+, 6,a) 7 A+ A2e	2 a 7 1	nu4	1442.33238	2.4	7.87E-03	2.4	1.9	6
(P)P (12,E , 7,a) 11 E Eo	9 a 6-1	nu4	1442.93647	-3.8	7.62E-03	3.8	1.1	5
(R)P (9,E , 4,a) 8 E Ee	7 a 5 1	nu4	1443.73617	-0.3	2.23E-03	1.0	-9.0	4
(P)P (12,A+, 6,a) 11 A+ A2e	6 a 5-1	nu4	1443.90681	-1.4	1.17E-02	3.9	-6.4	5
(Q)P (8,E , 4,a) 7 E Ee	4 s 4 0	2nu2	1444.13770	-2.2	6.57E-04	0.4	7.9	2
(P)P (12,E , 5,a) 11 E Eo	14 a 4-1	nu4	1444.81296	-1.6	4.85E-03	6.8	-8.1	2
(R)P (9,A-, 3,s) 8 A- A2e	5 s 4 1	nu4	1445.40907	-0.8	8.41E-03	3.6	0.3	7
(P)P (12,A-, 3,a) 11 A- A2o	10 a 2-1	nu4	1447.85790	15.6	8.55E-03	0.6	-4.5	3
(R)P (9,A+, 3,a) 8 A+ A2o	5 a 4 1	nu4	1448.78774	1.2	2.87E-03	2.5	-14.2	4
(Q)P (7,A-, 6,a) 6 A- A2e	1 s 6 0	2nu2	1449.21619	0.0	4.62E-03	2.3	9.8	7
(R)P (11,A+, 0,s) 10 A+ A2o	9 s 1 1	nu4	1449.49442	-1.1	2.00E-02	3.6	-2.6	7
(P)P (11,E , 1,s) 10 E Ee	18 s 0 1	nu4	1449.79242	-8.1	1.04E-02	3.5	-0.1	6
(R)P (9,E , 2,s) 8 E Eo	10 s 3 1	nu4	1450.17683	-3.5	2.27E-03	3.2	-9.5	3
(P)P (11,E , 2,s) 10 E Eo	18 s 1-1	nu4	1450.51249	-0.7	1.06E-02	2.7	0.3	6
**(S)P (9,A+, 0,s) 8 A+ A2o	6 a 2-1	nu4	1450.84597	-1.8	2.20E-03	2.6	10.7	5
(R)P (8,E , 5,a) 7 E Eo	5 a 6 1	nu4	1451.52067	0.8	5.76E-03	1.5	-2.3	7
(P)P (11,E , 4,s) 10 E Eo	13 s 3-1	nu4	1451.76261	1.9	1.12E-02	1.8	-1.3	6
**(P)P (9,E , 2,s) 8 E Eo	11 s 1 0	2nu2	1451.88221	6.6	5.62E-04	2.6	11.9	2
(P)P (11,E ,11,s) 10 E Ee	2 s10-1	nu4	1452.65241	5.1	6.98E-02	3.3	1.3	7
(P)P (11,E ,11,a) 10 E Eo	1 a10-1	nu4	1452.83213	-4.0	7.04E-02	3.8	2.6	6
(P)P (11,A+, 6,s) 10 A+ A2o	5 s 5-1	nu4	1453.31967	-0.9	3.03E-02	3.5	-2.9	6
(P)P (11,E ,10,s) 10 E Eo	2 s 9-1	nu4	1453.34052	0.3	4.95E-02	3.8	5.3	7
(R)P (9,E , 1,s) 8 E Ee	12 s 2 1	nu4	1453.55645	-0.6	9.15E-04	2.6	-2.1	3
(P)P (11,E , 7,s) 10 E Ee	8 s 6-1	nu4	1453.72514	-1.8	1.88E-02	3.1	-2.6	6
(P)P (11,A-, 9,s) 10 A- A2e	2 s 8-1	nu4	1453.74421	-2.2	6.93E-02	3.9	3.7	9
(P)P (11,E , 8,s) 10 E Eo	6 s 7-1	nu4	1453.87029	-2.4	2.58E-02	3.3	3.8	7
(P)P (11,E ,10,a) 10 E Ee	3 a 9-1	nu4	1453.92316	-1.0	4.83E-02	3.0	1.7	9
**(O)P (12,E , 4,s) 11 E Eo	17 a 2 1	nu4	1454.24268	0.0	4.13E-04	3.8	-2.7	3
**(*)P (11,A-, 3,s) 10 A- A2e	9 * * *	**	1454.76278	-12.4	1.33E-02	3.2	-2.2	7
(P)P (11,A+, 9,a) 10 A+ A2o	3 a 8-1	nu4	1454.80579	1.3	6.97E-02	3.6	1.2	9
(Q)P (8,A+, 0,a) 7 A+ A2e	5 s 0 0	2nu2	1455.43069	3.8	3.03E-03	2.5	3.0	4
(R)P (8,E , 4,s) 7 E Eo	6 s 5 1	nu4	1455.45636	0.2	8.78E-03	3.6	3.0	4
(P)P (11,E , 8,a) 10 E Ee	7 a 7-1	nu4	1455.50925	2.0	2.51E-02	3.9	-3.8	7
(P)P (11,E , 7,a) 10 E Eo	7 a 6-1	nu4	1456.06933	1.3	2.04E-02	3.3	-0.6	6
(P)P (11,A-, 6,a) 10 A- A2e	5 a 5-1	nu4	1456.52962	-0.1	3.24E-02	2.2	-4.1	3

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(P)P (11,E , 5,a)	10 E Eo 12 a 4-1	nu4	1456.92485	-1.7	1.44E-02	3.0	0.9	2
(P)P (11,E , 4,a)	10 E Ee 14 a 3-1	nu4	1457.19181	-3.4	1.13E-02	3.0	-6.6	3
(P)P (11,A+, 3,a)	10 A+ A2o 8 a 2-1	nu4	1458.10290	0.6	2.26E-02	3.2	-4.7	4
(P)P (11,E , 2,a)	10 E Ee 17 a 1-1	nu4	1458.49186	4.8	1.06E-02	0.6	-5.1	4
**(*)P (11,E , 1,a)	10 E Eo 19 * * *	**	1458.77786	-3.7	9.66E-03	3.3	-7.7	5
(R)P (8,E , 4,a)	7 E Ee 5 a 5 1	nu4	1458.94526	-0.2	6.12E-03	3.0	-5.4	4
**(S)P (8,A+, 0,a)	7 A+ A2e 6 s 2-1	nu4	1460.46135	3.6	4.78E-03	3.7	3.8	6
**(S)Q (10,E , 8,s)	10 E Eo 1 a10-1	nu4	1460.62026	-3.3	4.13E-04	3.0	13.3	3
**(N)P (10,A+, 3,s)	9 A+ A2e 7 s 0 0	2nu2	1460.75397	1.5	2.61E-03	4.0	-0.9	5
(R)P (8,A+, 3,s)	7 A+ A2e 4 s 4 1	nu4	1461.95688	-0.8	1.86E-02	2.2	1.2	7
(P)P (10,E , 1,s)	9 E Ee 16 s 0 1	nu4	1462.19014	-2.2	2.46E-02	3.5	-0.7	8
(P)P (10,E , 2,s)	9 E Eo 16 s 1-1	nu4	1463.29136	-2.6	2.47E-02	3.3	-1.0	8
(R)P (7,E , 5,s)	6 E Ee 2 s 6 1	nu4	1464.00063	-0.5	5.76E-03	3.8	3.9	8
(P)P (10,A+, 3,s)	9 A+ A2e 8 s 2-1	nu4	1464.63156	7.7	4.97E-02	3.6	-0.1	9
(R)P (8,A-, 3,a)	7 A- A2o 4 a 4 1	nu4	1464.81289	-1.2	1.06E-02	2.3	-6.4	4
(P)P (10,E , 4,s)	9 E Eo 11 s 3-1	nu4	1465.60441	1.4	2.74E-02	3.0	-1.0	8
**(Q)P (9,E , 1,a)	8 E Eo 13 s 1-1	nu4	1465.65246	-2.7	1.01E-03	2.7	14.8	3
(R)P (7,E , 5,a)	6 E Eo 3 a 6 1	nu4	1466.20783	3.1	7.11E-03	2.9	4.0	8
(P)P (10,E , 5,s)	9 E Ee 10 s 4-1	nu4	1466.82025	-0.2	3.36E-02	3.7	4.7	8
**(O)P (10,A-, 3,a)	9 A- A2o 7 s 1 1	nu4	1466.89776	3.9	1.38E-02	3.3	-1.3	6
(R)P (8,E , 2,s)	7 E Eo 10 s 3 1	nu4	1467.34505	-0.1	7.54E-03	3.6	-2.1	6
(P)P (10,A-, 6,s)	9 A- A2o 4 s 5-1	nu4	1467.77835	-1.2	7.83E-02	2.8	1.5	9
(P)P (10,E , 7,s)	9 E Ee 6 s 6-1	nu4	1468.45943	-1.9	4.95E-02	2.8	2.3	9
(P)P (10,E ,10,s)	9 E Eo 1 s 9-1	nu4	1468.73700	5.3	1.26E-01	3.2	1.9	9
(P)P (10,E , 8,s)	9 E Eo 5 s 7-1	nu4	1468.84993	-1.6	6.69E-02	3.9	5.3	9
(P)P (10,A+, 9,s)	9 A+ A2e 1 s 8-1	nu4	1468.94324	0.4	1.75E-01	3.1	1.1	7
(R)P (8,E , 2,a)	7 E Ee 9 a 3 1	nu4	1469.17632	-1.3	3.32E-03	4.0	-7.2	5
(P)P (10,A-, 9,a)	9 A- A2o 2 a 8-1	nu4	1469.52175	-1.2	1.79E-01	3.3	1.7	8
(P)P (10,E , 8,a)	9 E Ee 5 a 7-1	nu4	1469.89154	1.0	6.54E-02	2.9	0.1	9
(P)P (10,E , 5,a)	9 E Eo 10 a 4-1	nu4	1469.96398	0.0	3.41E-02	3.4	-2.0	8
(P)P (10,E , 7,a)	9 E Eo 6 a 6-1	nu4	1470.06265	1.6	4.76E-02	2.6	-6.9	7
(P)P (10,A+, 6,a)	9 A+ A2e 4 a 5-1	nu4	1470.07208	1.3	8.62E-02	3.2	4.3	5
**(S)Q (12,E , 8,a)	12 E Ee 5 s10-1	nu4	1471.24527	-2.8	2.33E-04	4.1	-3.6	2
(P)P (10,A-, 3,a)	9 A- A2o 8 a 2-1	nu4	1471.62126	-5.8	4.20E-02	3.8	-4.9	7
(R)P (7,E , 4,s)	6 E Eo 4 s 5 1	nu4	1471.85135	0.5	1.21E-02	3.5	2.3	3
**(S)P (6,E , 1,a)	5 E Eo 4 s 3-1	nu4	1472.72323	-0.9	1.22E-03	3.5	4.6	3
(R)P (7,E , 4,a)	6 E Ee 4 a 5 1	nu4	1474.42585	1.2	1.12E-02	1.8	-2.2	6
(R)P (9,A+, 0,s)	8 A+ A2o 7 s 1 1	nu4	1474.72552	1.2	1.07E-01	3.0	1.8	8
**(O)P (13,A-, 6,a)	12 A- A2e 9 s 4 1	nu4	1474.85020	-6.8	3.07E-04	0.0	-9.2	2
**(S)P (6,E , 1,s)	5 E Ee 5 a 3-1	nu4	1474.95003	0.2	1.33E-03	2.7	9.3	3
(P)P (9,E , 1,s)	8 E Ee 14 s 0 1	nu4	1475.33550	0.5	5.21E-02	2.9	-0.6	9
(P)P (9,E , 2,s)	8 E Eo 13 s 1-1	nu4	1476.87232	-2.2	5.25E-02	2.5	-0.7	9
(R)P (7,A-, 3,s)	6 A- A2e 3 s 4 1	nu4	1478.70317	-0.5	3.37E-02	1.5	3.7	8
**(S)P (7,A+, 0,s)	6 A+ A2o 4 a 2-1	nu4	1479.14254	2.0	6.13E-03	3.8	5.6	7
**(Q)P (8,E , 1,a)	7 E Eo 12 s 1-1	nu4	1479.95208	-0.8	1.77E-03	3.9	11.9	4
(P)P (9,E , 4,s)	8 E Eo 9 s 3-1	nu4	1480.18304	0.9	6.21E-02	3.3	2.5	9
**(O)P (10,E , 2,s)	9 E Eo 17 a 0 1	nu4	1480.85039	-7.8	3.13E-04	3.2	-4.2	2
**(O)P (11,A+, 3,a)	10 A+ A2o 9 s 1 1	nu4	1480.92777	-1.2	4.89E-04	2.5	13.4	2
(P)P (9,E , 1,a)	8 E Eo 15 a 0 1	nu4	1481.57667	-5.1	5.39E-02	2.8	-3.5	9
(P)P (9,E , 2,a)	8 E Ee 13 a 1-1	nu4	1482.05882	-3.8	5.64E-02	3.2	-2.9	9
(P)P (9,A+, 3,a)	8 A+ A2o 6 a 2-1	nu4	1482.68791	-2.1	1.20E-01	3.6	-2.1	9
(P)P (9,A+, 6,s)	8 A+ A2o 3 s 5-1	nu4	1482.95031	-1.3	1.78E-01	3.8	1.9	8
(P)P (9,E , 4,a)	8 E Ee 10 a 3-1	nu4	1483.24333	0.6	6.55E-02	2.9	-1.0	9
(P)P (9,E , 7,s)	8 E Ee 4 s 6-1	nu4	1483.87513	-1.1	1.13E-01	2.7	1.7	9
(P)P (9,E , 5,a)	8 E Eo 8 a 4-1	nu4	1483.94545	1.4	7.65E-02	3.7	0.1	9
(P)P (9,E , 8,s)	8 E Eo 3 s 7-1	nu4	1484.48053	0.6	1.50E-01	3.9	1.2	8
(P)P (9,A-, 9,s)	8 A- A2e 1 s 8-1	nu4	1484.76631	4.5	4.29E-01	1.1	3.6	5
(P)P (9,E , 7,a)	8 E Eo 4 a 6-1	nu4	1484.89417	0.7	1.20E-01	1.0	3.9	7
(P)P (9,A+, 9,a)	8 A+ A2o 1 a 8-1	nu4	1484.96601	-4.6	4.36E-01	2.2	5.7	4
(P)P (9,E , 8,a)	8 E Ee 3 a 7-1	nu4	1485.05372	-1.4	1.50E-01	3.8	-0.3	8
**(O)P (9,E , 2,a)	8 E Ee 14 s 0 1	nu4	1485.63436	0.2	6.85E-04	2.2	12.4	3
(R)P (7,E , 2,a)	6 E Ee 8 a 3 1	nu4	1486.24635	-2.0	9.90E-03	3.2	-6.7	5
**(O)P (9,A-, 3,s)	8 A- A2e 7 a 1 1	nu4	1488.05868	-6.1	1.29E-02	3.7	-5.7	7
**(N)P (8,A+, 3,s)	7 A+ A2e 5 s 0 0	2nu2	1488.49644	4.2	2.72E-03	3.4	9.9	5
(R)P (6,E , 4,s)	5 E Eo 2 s 5 1	nu4	1488.59321	-0.6	9.91E-03	2.9	1.4	7
(R)P (7,E , 1,s)	6 E Ee 9 s 2 1	nu4	1488.91352	-4.2	8.74E-03	2.2	-0.2	6
(P)P (8,E , 1,s)	7 E Ee 12 s 0 1	nu4	1489.26230	2.9	1.00E-01	3.8	1.0	7
(R)P (7,E , 1,a)	6 E Eo 9 a 2 1	nu4	1489.73795	-1.0	3.80E-03	2.2	-0.7	4
(R)P (6,E , 4,a)	5 E Ee 2 a 5 1	nu4	1490.18498	2.5	1.13E-02	1.5	-1.4	5
(P)P (8,E , 2,s)	7 E Eo 12 s 1-1	nu4	1491.30288	-1.2	1.01E-01	2.6	0.5	9
**(O)P (12,A+, 6,a)	11 A+ A2e 8 s 4 1	nu4	1491.59640	5.9	6.95E-04	2.8	-16.6	3
**(S)P (5,E , 1,s)	4 E Ee 4 a 3-1	nu4	1491.77148	-1.7	1.02E-03	3.3	7.9	4
**(S)P (6,A+, 0,a)	5 A+ A2e 4 s 2-1	nu4	1492.19289	0.3	7.27E-03	3.4	1.6	7
**(O)P (9,E , 2,s)	8 E Eo 15 a 0 1	nu4	1492.79599	-5.1	7.57E-04	2.8	11.7	2
(P)P (8,A+, 3,s)	7 A+ A2e 6 s 2-1	nu4	1493.52697	3.9	2.16E-01	3.1	1.8	6
(R)P (8,A+, 0,a)	7 A+ A2e 7 a 1 1	nu4	1493.86318	-0.6	2.17E-01	2.5	0.5	6
(Q)P (5,E , 4,a)	4 E Ee 1 s 4 0	2nu2	1493.92737	1.0	6.09E-03	3.6	8.5	5
(P)P (8,E , 1,a)	7 E Eo 13 a 0 1	nu4	1494.24211	-0.3	1.06E-01	3.6	-2.2	9
**(Q)P (7,E , 1,a)	6 E Eo 10 s 1-1	nu4	1495.13209	-1.0	2.40E-03	3.7	-4.9	4
(P)P (8,E , 2,a)	7 E Ee 11 a 1-1	nu4	1495.24254	0.1	1.09E-01	3.6	-1.7	9
(P)P (8,E , 4,s)	7 E Eo 8 s 3-1	nu4	1495.52017	0.3	1.22E-01	3.7	1.7	9
(R)P (6,A+, 3,s)	5 A+ A2e 2 s 4 1	nu4	1495.72115	-0.2	4.41E-02	0.7	3.6	8
(P)P (8,A-, 3,a)	7 A- A2o 5 a 2-1	nu4	1496.17363	2.8	2.02E-01	3.1	-8.0	3
(P)P (8,E , 5,s)	7 E Ee 6 s 4-1	nu4	1497.33323	-0.6	1.45E-01	2.5	0.8	8
(R)P (6,A-, 3,a)	5 A- A2o 3 a 4 1	nu4	1497.51536	1.0	4.05E-02	1.5	-1.1	8
(Q)P (5,A+, 3,a)	4 A+ A2o 1 s 3 0	2nu2	1497.63262	-2.7	6.71E-03	3.0	6.3	3
(P)P (8,E , 4,a)	7 E Ee 8 a 3-1	nu4	1497.67493	1.7	1.31E-01	2.6	0.4	7
**(Q)P (7,E , 1,s)	6 E Ee 10 a 1-1	nu4	1499.11129	3.1	2.74E-03	3.9	-1.6	4
**(O)P (8,E , 2,a)	7 E Ee 12 s 0 1	nu4	1499.58364	2.8	1.46E-03	6.5	-6.7	2
(P)P (8,A+, 6,a)	7 A+ A2e 3 a 5-1	nu4	1499.80268	0.4	3.87E-01	1.2	3.4	5
(P)P (8,E , 7,s)	7 E Ee 2 s 6-1	nu4	1499.94384	0.6	2.38E-01	3.4	1.0	8
(P)P (8,E , 8,s)	7 E Eo 2 s 7-1	nu4	1500.73347	3.6	3.31E-01	0.9	3.2	3
(R)P (6,E , 2,s)	5 E Eo 6 s 3 1	nu4	1501.89046	-1.4	2.98E-02	0.5	3.9	2
**(O)P (10,A+, 3,s)	9 A+ A2e 9 a 1 1	nu4	1502.23170	-8.1	1.12E-03	2.8	2.8	3
(Q)P (5,E , 1,a)	4 E Eo 3 s 1 0	2nu2	1502.35072	-3.3	7.99E-04	0.7	-4.7	2
**(S)Q (9,A+, 6,s)	9 A- A2o 2 a 8-1	nu4	1502.62492	-0.7	2.70E-03	2.1	8.7	4
(R)P (7,A+, 0,s)	6 A+ A2o 5 s 1 1	nu4	1502.75536	6.1	3.62E-01	1.7	4.7	4
(R)P (6,E , 2,a)	5 E Ee 6 a 3 1	nu4	1503.42603	-1.1	2.23E-02	2.5	-2.2	7
**(O)P (11,A+, 6,s)	10 A+ A2o 6 a 4 1	nu4	1503.55038	-3.9	8.78E-04	1.5	-8.5	3
(P)P (7,E , 1,s)	6 E Ee 11 s 0 1	nu4	1504.02175	4.2	1.72E-01	0.8	3.4	6
**(O)P (8,A-, 3,a)	7 A- A2o 6 s 1 1	nu4	1504.86526	-5.3	2.06E-02	2.8	-7.8	6
(P)P (7,A-, 3,s)	6 A- A2e 4 s 2-1	nu4	1509.13789	1.3	3.84E-01	1.9	5.3	4
**(Q)P (6,E , 1,a)	5 E Eo 8 s 1-1	nu4	1511.18640	-0.9	3.26E-03	2.8	-9.6	4
(P)P (7,A+, 3,a)	6 A+ A2o 4 a 2-1	nu4	1511.31249	1.9	4.18E-01	1.6	2.4	4
**(S)P (5,A+, 0,s)	4 A+ A2o 3 a 2-1	nu4	1511.44007	0.2	7.42E-03	2.9	2.6	3
**(S)Q (11,A-, 6,a)	11 A+ A2e 3 s 8-1	nu4	1511.72277	-4.0	1.20E-03	6.2	3.9	2
(P)P (7,E , 4,a)	6 E Ee 7 a 3-1	nu4	1513.04362	1.5	2.34E-01	1.2	1.3	6
(R)P (5,A-, 3,s)	4 A- A2e 1 s 4 1	nu4	1513.08180	-0.7	3.52E-02	2.5	5.4	7
(P)P (7,E , 5,s)	6 E Ee 5 s 4-1	nu4	1513.64802	-0.5	2.77E-01	0.8	3.5	4
(R)P (5,A+, 3,a)	4 A+ A2o 2 a 4 1	nu4	1514.23228	1.7	3.65E-02	3.5	-0.9	7
**(S)Q (7,E , 5,a)	7 E Eo 2 s 7-1	nu4	1514.29061	3.7	1.38E-03	0.1	2.5	2
(P)P (7,E , 5,a)	6 E Eo 5 a 4-1	nu4	1514.60537	0.1	2.85E-01	0.8	2.3	4
(P)P (7,A+, 6,s)	6 A+ A2o 1 s 5-1	nu4	1515.32445	0.4	7.12E-01	0.6	3.3	3
(P)P (7,A-, 6,a)	6 A- A2e 2 a 5-1	nu4	1515.88172	-1.9	7.13E-01	0.8	1.9	3
(P)P (7,E , 7,s)	6 E Ee 1 s 6-1	nu4	1516.63097	2.9	4.67E-01	1.7	1.7	3
(P)P (7,E , 7,a)	6 E Eo 1 a 6-1	nu4	1516.85172	-4.7	4.64E-01	2.7	1.3	3
**(S)Q (12,A+, 6,a)	12 A- A2e 4 s 8-1	nu4	1518.08183	-2.1	5.30E-04	8.4	-8.3	2
(Q)P (4,E , 2,a)	3 E Ee 1 s 2 0	2nu2	1518.15497	-1.4	7.56E-03	2.3	3.0	4
**(S)Q (8,E , 5,a)	8 E Eo 3 s 7-1	nu4	1518.43361	0.2	2.03E-03	1.6	4.5	3
**(O)P (7,E , 2,s)	6 E Eo 11 a 0 1	nu4	1519.29626	3.8	1.94E-03	2.2	-2.2	3
(R)P (5,E , 2,s)	4 E Eo 4 s 3 1	nu4	1519.51659	-1.0	3.68E-02	2.9	0.9	5
(P)P (6,E , 1,s)	5 E Ee 9 s 0 1	nu4	1519.66272	4.1	2.52E-01	0.8	3.7	5
(Q)P (4,E , 1,a)	3 E Eo 2 s 1 0	2nu2	1519.86495	-2.2	5.84E-03	3.8	1.7	2
(Q)P (4,A+, 0,a)	3 A+ A2e 1 s 0 0	2nu2	1520.44895	-2.4	1.07E-02	2.8	3.6	3
(P)P (6,E , 2,s)	5 E Eo 8 s 1-1	nu4	1522.77640	-0.8	2.65E-01	1.3	4.0	3
**(S)Q (9,E , 5,a)	9 E Eo 5 s 7-1	nu4	1523.12597	-1.9	1.66E-03	1.5	-2.5	2
**(O)P (7,A-, 3,s)	6 A- A2e 5 a 1 1	nu4	1524.45697	-6.4	1.46E-02	1.9	-3.4	3
(P)P (6,E , 2,a)	5 E Ee 8 a 1-1	nu4	1524.70875	3.4	2.89E-01	1.5	2.0	4
(R)P (5,E , 1,s)	4 E Ee 6 s 2 1	nu4	1524.95389	-2.8	4.11E-02	3.2	0.5	5
(P)P (6,A+, 3,s)	5 A+ A2e 4 s 2-1	nu4	1525.76253	0.6	6.10E-01	0.7	3.6	3
(R)P (5,E , 1,a)	4 E Eo 5 a 2 1	nu4	1525.84403	-1.4	2.90E-02	0.3	-0.1	2
**(O)P (8,E , 4,s)	7 E Eo 11 a 2 1	nu4	1526.76340	1.4	3.26E-03	3.7	2.9	2
(P)P (6,A-, 3,a)	5 A- A2o 4 a 2-1	nu4	1527.06141	1.7	6.38E-01	0.8	2.1	3
(P)P (6,E , 4,a)	5 E Ee 5 a 3-1	nu4	1529.28962	0.0	3.85E-01	1.6	2.8	4
**(O)P (6,E , 2,a)	5 E Ee 9 s 0 1	nu4	1530.00918	4.0	4.31E-03	2.9	-2.7	5
(P)P (6,E , 5,s)	5 E Ee 3 s 4-1	nu4	1530.61417	0.1	4.78E-01	1.4	4.1	4
(P)P (6,E , 5,a)	5 E Eo 3 a 4-1	nu4	1531.15892	-1.9	4.80E-01	1.4	2.9	4
(P)P (6,A-, 6,s)	5 A- A2o 1 s 5-1	nu4	1532.45054	2.2	1.25E+00	1.0	3.0	3
(P)P (6,A+, 6,a)	5 A+ A2e 1 a 5-1	nu4	1532.68249	-4.7	1.24E+00	1.1	2.8	3
(R)P (5,A+, 0,s)	4 A+ A2o 4 s 1 1	nu4	1533.79674	6.3	7.10E-01	1.2	4.0	3
**(N)P (10,E , 7,s)	9 E Ee 8 s 4 0	2nu2	1534.68683	0.1	7.91E-04	1.6	-9.4	2
**(O)P (7,A+, 3,a)	6 A+ A2o 5 s 1 1	nu4	1534.92514	5.7	6.80E-03	3.7	-2.8	2
**(O)P (11,E , 8,s)	10 E Eo 9 a 6 1	nu4	1535.63780	-1.8	6.29E-04	0.7	-9.3	2
(P)P (5,E , 1,s)	4 E Ee 8 s 0 1	nu4	1536.20871	2.7	3.21E-01	0.8	4.1	5
(Q)P (3,E , 2,a)	2 E Ee 1 s 2 0	2nu2	1536.46095	2.8	1.46E-02	2.5	5.4	4
(R)P (4,E , 2,s)	3 E Eo 3 s 3 1	nu4	1537.47055	-0.8	2.73E-02	9.2	-1.0	2
(P)P (5,E , 1,a)	4 E Eo 7 a 0 1	nu4	1538.01023	5.0	3.62E-01	1.1	2.2	5
(Q)P (3,E , 1,a)	2 E Eo 1 s 1 0	2nu2	1538.07471	0.5	1.56E-02	3.4	5.4	4
(P)P (5,E , 2,s)	4 E Eo 6 s 1-1	nu4	1539.75957	-0.9	3.60E-01	2.1	3.7	4
(P)P (5,E , 2,a)	4 E Ee 7 a 1-1	nu4	1541.00408	2.0	3.88E-01	1.5	2.6	4
**(O)P (6,A-, 3,a)	5 A- A2o 5 s 1 1	nu4	1541.60319	-6.6	1.74E-02	2.7	-5.3	3
(P)P (5,A-, 3,s)	4 A- A2e 2 s 2-1	nu4	1542.97972	-0.2	8.77E-01	1.0	3.0	3
(R)P (4,E , 1,s)	3 E Ee 4 s 2 1	nu4	1543.22386	-1.6	5.58E-02	3.2	-0.9	6
(P)P (5,A+, 3,a)	4 A+ A2o 3 a 2-1	nu4	1543.85493	-0.1	9.24E-01	0.8	3.0	3
(R)P (4,E , 1,a)	3 E Eo 4 a 2 1	nu4	1544.01905	-0.4	4.79E-02	3.1	-1.9	5
(P)P (5,E , 4,s)	4 E Eo 2 s 3-1	nu4	1545.80435	-0.1	5.79E-01	3.5	5.3	4
**(O)P (8,E , 5,s)	7 E Ee 9 a 3 1	nu4	1546.02779	-1.3	3.19E-03	2.1	-11.7	2
(P)P (5,E , 4,a)	4 E Ee 4 a 3-1	nu4	1546.33131	-1.9	5.79E-01	2.5	3.6	4
**(O)P (5,E , 2,a)	4 E Ee 8 s 0 1	nu4	1546.56032	2.8	5.81E-03	3.1	10.6	3
**(S)Q (9,E , 4,s)	9 E Eo 6 a 6-1	nu4	1547.69840	2.5	2.05E-03	1.0	-1.4	3
**(Q)P (4,E , 1,s)	3 E Ee 5 a 1-1	nu4	1547.89621	0.2	3.72E-03	0.1	0.6	3
**(N)P (8,A-, 6,s)	7 A- A2o 3 s 3 0	2nu2	1547.95041	0.2	1.72E-03	6.2	-9.1	2
(P)P (5,E , 5,s)	4 E Ee 2 s 4-1	nu4	1548.18411	1.2	7.47E-01	0.4	2.8	3
(P)P (5,E , 5,a)	4 E Eo 1 a 4-1	nu4	1548.42863	-4.3	7.39E-01	0.8	2.1	3
**(M)P (8,E , 4,s)	7 E Eo 13 a 0 1	nu4	1549.11809	-0.3	6.60E-04	4.2	1.3	2
**(S)Q (5,A+, 3,a)	5 A- A2o 1 s 5-1	nu4	1550.79788	1.8	4.64E-03	2.3	7.5	3
(R)P (4,A+, 0,a)	3 A+ A2e 3 a 1 1	nu4	1552.15738	6.7	8.66E-01	1.2	3.5	3
**(S)Q (5,A-, 3,s)	5 A+ A2e 1 a 5-1	nu4	1552.57680	-3.9	4.73E-03	2.0	4.8	3
(P)P (4,E , 1,s)	3 E Ee 6 s 0 1	nu4	1553.62943	1.1	3.55E-01	1.4	4.2	5
**(S)Q (6,A-, 3,a)	6 A+ A2o 1 s 5-1	nu4	1553.80429	-0.5	8.29E-03	2.6	8.0	3

(I)		(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(P)P (4,E , 1,a)	3 E Eo	6 a 0 1	nu4	1554.73399	2.6	3.91E-01	1.2	2.0	4
**(S)Q (6,A+, 3,s)	6 A- A2e	2 a 5-1	nu4	1555.78658	-1.5	7.94E-03	3.7	0.1	5
(Q)P (2,E , 1,a)	1 E Eo	1 s 1 0	2nu2	1556.90323	3.6	2.11E-02	1.8	3.6	6
(P)P (4,A+, 3,s)	3 A+ A2e	2 s 2-1	nu4	1560.88956	-0.4	1.19E+00	1.1	3.5	3
**(O)P (6,E , 4,a)	5 E Ee	7 s 2 1	nu4	1561.20060	-4.2	6.34E-03	1.1	-1.7	3
(P)P (4,A-, 3,a)	3 A- A2o	2 a 2-1	nu4	1561.38333	-1.9	1.21E+00	0.9	3.3	3
(R)P (3,E , 1,s)	2 E Ee	2 s 2 1	nu4	1561.76078	-1.4	4.48E-02	2.0	0.2	6
**(O)P (5,A-, 3,s)	4 A- A2e	3 a 1 1	nu4	1562.09908	-5.9	1.23E-02	1.7	-9.2	5
(R)P (3,E , 1,a)	2 E Eo	2 a 2 1	nu4	1562.36010	-0.1	4.57E-02	3.7	2.8	6
**(O)P (13,A+,12,s)	12 A+ A2o	2 a10 1	nu4	1562.79262	-3.6	5.77E-04	2.1	5.3	2
**(M)P (7,E , 4,s)	6 E Eo	11 a 0 1	nu4	1563.10613	3.8	8.50E-04	0.3	4.5	2
**(O)P (6,E , 4,s)	5 E Eo	7 a 2 1	nu4	1563.39857	-1.5	5.03E-03	3.7	-7.0	4
**(O)P (7,E , 5,s)	6 E Ee	8 a 3 1	nu4	1563.65494	-2.1	4.82E-03	3.2	-6.0	2
(P)P (4,E , 4,s)	3 E Eo	1 s 3-1	nu4	1563.82402	0.3	8.06E-01	3.9	3.3	4
(P)P (4,E , 4,a)	3 E Ee	2 a 3-1	nu4	1564.08208	-3.9	7.92E-01	0.7	2.1	3
**(S)Q (8,A+, 3,s)	8 A- A2e	4 a 5-1	nu4	1564.22726	2.1	6.20E-03	2.2	-12.5	2
**(O)P (11,E ,10,s)	10 E Eo	4 a 8 1	nu4	1565.60739	-1.2	7.23E-04	4.0	-9.2	2
**(N)P (8,E , 7,s)	7 E Ee	4 s 4 0	2nu2	1565.69441	-1.8	1.07E-03	0.6	-5.5	2
(Q)Q (11,E ,11,a)	11 E Eo	1 s11 0	2nu2	1565.80805	0.0	1.09E-02	2.0	-9.7	7
**(Q)P (3,E , 1,s)	2 E Ee	3 a 1-1	nu4	1565.96460	-1.6	2.02E-03	1.0	4.1	2
**(O)P (5,A+, 3,a)	4 A+ A2o	4 s 1 1	nu4	1566.21158	6.0	9.88E-03	3.5	-5.5	4
**(S)Q (9,A+, 3,a)	9 A- A2o	4 s 5-1	nu4	1566.22620	-1.4	4.43E-03	3.3	-6.4	4
**(N)P (10,A+, 9,s)	9 A+ A2e	2 s 6 0	2nu2	1566.34843	-1.2	2.03E-03	3.5	-6.7	4
**(N)P (9,E , 8,s)	8 E Eo	5 s 5 0	2nu2	1566.43124	-1.4	1.21E-03	0.7	-1.5	2
**(U)Q (8,E , 1,s)	8 E Ee	7 a 5 1	nu4	1566.95596	-0.1	3.04E-04	0.3	-13.5	2
**(M)P (8,E , 5,a)	7 E Eo	12 s 1-1	nu4	1567.00504	-1.5	2.65E-04	1.6	5.1	2
(Q)Q (14,E ,13,a)	14 E Eo	2 s13 0	2nu2	1567.17712	-0.5	1.82E-03	0.7	-9.4	2
(R)P (3,A+, 0,s)	2 A+ A2o	2 s 1 1	nu4	1567.99300	2.1	7.09E-01	1.1	4.5	3
**(S)Q (9,A-, 3,s)	9 A+ A2e	4 a 5-1	nu4	1569.54470	1.9	4.26E-03	0.1	-10.3	2
(R)Q (12,E ,11,s)	12 E Ee	2 s12 1	nu4	1570.15916	-4.2	6.35E-03	0.9	4.1	2
**(O)P (11,E ,10,a)	10 E Ee	6 s 8 1	nu4	1570.64654	0.3	1.28E-03	1.3	-11.4	2
**(S)Q (4,E , 2,s)	4 E Eo	1 a 4-1	nu4	1570.68773	-3.6	2.65E-03	2.0	8.2	3
(Q)Q (10,E ,10,a)	10 E Ee	1 s10 0	2nu2	1571.25852	1.4	1.95E-02	2.8	-3.7	5
**(S)Q (5,E , 2,a)	5 E Ee	3 s 4-1	nu4	1571.36617	-0.1	4.30E-03	2.2	-5.9	4
**(S)Q (10,A-, 3,a)	10 A+ A2o	5 s 5-1	nu4	1571.53001	-1.5	2.50E-03	2.6	-10.6	2
(P)P (3,E , 1,s)	2 E Ee	4 s 0 1	nu4	1571.83146	-0.2	3.41E-01	0.9	3.5	4
(P)P (3,E , 1,a)	2 E Eo	4 a 0 1	nu4	1572.48814	0.1	3.68E-01	1.4	3.3	5
(Q)Q (13,A-,12,a)	13 A+ A2e	2 s12 0	2nu2	1572.87814	-1.1	8.49E-03	1.0	-2.8	4
**(S)Q (5,E , 2,s)	5 E Eo	3 a 4-1	nu4	1573.34940	-1.5	4.94E-03	3.1	2.9	5
**(O)P (9,E , 8,a)	8 E Ee	5 s 6 1	nu4	1574.09503	0.5	3.14E-03	3.5	-15.1	4
**(S)Q (6,E , 2,a)	6 E Ee	5 s 4-1	nu4	1574.38297	-0.8	5.23E-03	3.6	-6.6	5
(P)P (3,E , 2,s)	2 E Eo	3 s 1-1	nu4	1575.85182	-0.7	4.92E-01	3.9	0.2	3
**(S)Q (7,E , 2,a)	7 E Ee	6 s 4-1	nu4	1577.97652	-1.2	5.14E-03	3.7	-1.6	6
(Q)Q (12,E ,11,a)	12 E Eo	3 s11 0	2nu2	1578.21424	-1.5	9.14E-03	3.4	1.1	7
(P)P (3,A-, 3,s)	2 A- A2e	1 s 2-1	nu4	1579.36175	-0.2	1.49E+00	0.7	3.1	3
**(O)P (10,A+, 9,s)	9 A+ A2e	3 a 7 1	nu4	1580.44409	-1.9	2.49E-03	0.2	0.7	2
**(O)P (8,E , 7,s)	7 E Ee	5 a 5 1	nu4	1580.50270	1.0	4.22E-03	2.4	12.0	3
**(O)P (7,A+, 6,s)	6 A+ A2o	3 a 4 1	nu4	1580.83558	-0.5	9.48E-03	2.9	-7.9	8
**(O)P (6,E , 5,s)	5 E Ee	6 a 3 1	nu4	1581.33496	-1.0	5.22E-03	1.9	-12.8	5
(R)Q (10,A+, 9,s)	10 A- A2e	1 s10 1	nu4	1581.63490	-3.1	5.01E-02	3.0	8.5	10
**(O)P (5,E , 4,s)	4 E Eo	5 a 2 1	nu4	1581.82158	-1.3	5.13E-03	3.5	-5.5	5
**(O)P (3,E , 2,a)	2 E Ee	4 s 0 1	nu4	1582.18362	-0.9	3.28E-03	5.2	9.7	2
**(S)Q (11,A-, 3,s)	11 A+ A2e	6 a 5-1	nu4	1582.53224	-1.1	1.23E-03	2.7	-10.0	3
**(N)P (8,E , 8,s)	7 E Eo	4 s 5 0	2nu2	1582.81828	-3.3	9.18E-04	1.9	-3.1	2
**(Q)P (2,E , 1,a)	1 E Eo	2 s 1-1	nu4	1582.87705	-1.3	3.90E-04	0.5	-1.3	2
(Q)Q (11,E ,10,a)	11 E Ee	2 s10 0	2nu2	1583.19061	-1.4	1.75E-02	3.2	-1.5	10
(Q)Q (14,A+,12,a)	14 A- A2e	3 s12 0	2nu2	1583.61133	-2.9	2.73E-03	2.2	-11.4	5
**(O)P (3,E , 2,s)	2 E Eo	4 a 0 1	nu4	1584.34444	0.2	1.90E-03	1.2	-6.3	2
**(O)P (11,E ,11,a)	10 E Eo	3 s 9 1	nu4	1584.37623	-0.2	1.03E-03	0.5	-11.7	2
(Q)Q (7,E , 7,a)	7 E Eo	1 s 7 0	2nu2	1584.62736	0.2	6.59E-02	3.9	0.8	9
**(S)Q (8,E , 2,s)	8 E Eo	8 a 4-1	nu4	1585.48515	1.6	4.02E-03	3.8	-1.2	9
**(O)P (4,A+, 3,s)	3 A+ A2e	3 a 1 1	nu4	1586.12028	6.8	7.34E-03	1.6	-6.3	10
**(O)P (10,E ,10,a)	9 E Ee	4 s 8 1	nu4	1586.61878	0.6	1.65E-03	0.7	-13.5	2
(R)P (2,A+, 0,a)	1 A+ A2e	2 a 1 1	nu4	1586.87147	0.7	4.51E-01	1.6	2.6	4
**(S)Q (9,E , 2,a)	9 E Ee	10 s 4-1	nu4	1586.97694	-0.2	2.89E-03	8.0	7.5	2
(R)Q (9,E , 8,s)	9 E Eo	2 s 9 1	nu4	1587.12189	-2.2	4.33E-02	3.0	6.4	10
(R)Q (11,A-, 9,s)	11 A+ A2e	2 s10 1	nu4	1587.29376	0.7	3.34E-02	3.5	7.8	11
(R)Q (12,A-, 9,a)	12 A+ A2o	2 a10 1	nu4	1587.49175	-3.5	5.84E-03	3.7	14.0	6
(Q)Q (6,A+, 6,a)	6 A- A2e	1 s 6 0	2nu2	1588.02913	0.3	1.74E-01	2.2	3.5	6
(Q)Q (13,E ,11,a)	13 E Eo	5 s11 0	2nu2	1588.23449	-4.7	3.81E-03	3.1	8.5	4
(R)Q (13,E ,10,s)	13 E Eo	6 s11 1	nu4	1588.57227	1.4	3.25E-03	2.4	4.2	5
**(O)P (9,A+, 9,a)	8 A+ A2o	2 s 7 1	nu4	1588.76877	0.2	5.18E-03	3.6	-8.3	8
**(S)Q (4,E , 1,a)	4 E Eo	2 s 3-1	nu4	1588.84509	-0.7	4.66E-03	3.3	-1.3	9
(R)Q (14,E ,10,a)	14 E Ee	6 a11 1	nu4	1589.88671	-10.1	5.48E-04	0.8	0.3	2
**(S)Q (12,A+, 3,s)	12 A- A2e	7 a 5-1	nu4	1590.20078	0.3	6.46E-04	3.0	6.2	2
**(U)Q (7,A+, 0,s)	7 A- A2o	4 a 4 1	nu4	1590.25643	-1.3	1.84E-03	4.0	-13.0	4
(P)P (2,E , 1,s)	1 E Ee	2 s 0 1	nu4	1590.69160	-0.8	2.85E-01	0.8	1.8	4
(Q)Q (5,E , 5,a)	5 E Eo	1 s 5 0	2nu2	1590.88041	0.4	1.02E-01	1.7	2.6	7
(P)P (2,E , 1,a)	1 E Eo	3 a 0 1	nu4	1591.10494	-1.4	2.94E-01	1.1	1.5	4
**(S)Q (5,E , 1,a)	5 E Eo	4 s 3-1	nu4	1591.33128	-0.6	6.62E-03	3.5	-0.2	7
(R)Q (11,E , 8,a)	11 E Ee	5 a 9 1	nu4	1591.43837	-2.3	5.25E-03	3.9	10.5	7
(R)Q (10,E , 8,s)	10 E Eo	3 s 9 1	nu4	1592.16478	1.0	3.21E-02	2.8	6.7	11
(R)Q (9,E , 8,a)	9 E Ee	3 a 9 1	nu4	1592.21111	0.2	5.75E-02	3.4	-1.6	10
**(S)Q (10,E , 2,a)	10 E Ee	12 s 4-1	nu4	1592.39114	-0.1	1.37E-03	1.8	-13.4	2
(R)Q (8,E , 7,s)	8 E Ee	2 s 8 1	nu4	1592.44915	-1.1	7.36E-02	3.2	8.5	7

(I)		(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
**(O)P (7,E , 7,a)	6 E Eo	4 s 5 1	nu4	1592.77931	0.1	4.72E-03	3.7	-0.6	5
(R)Q (12,A+, 9,s)	12 A- A2e	3 s10 1	nu4	1592.99774	0.8	1.57E-02	2.5	9.8	10
**(S)Q (5,E , 1,s)	5 E Ee	5 a 3-1	nu4	1593.60603	0.2	6.87E-03	3.4	-2.7	9
**(S)Q (6,E , 1,a)	6 E Eo	6 s 3-1	nu4	1594.39513	-0.8	7.40E-03	0.7	3.9	4
**(O)P (6,A+, 6,a)	5 A+ A2e	2 s 4 1	nu4	1594.62927	-0.3	9.28E-03	0.7	-13.3	2
(P)P (2,E , 2,s)	1 E Eo	2 s 1-1	nu4	1594.79077	-0.8	5.42E-01	1.3	2.3	4
(Q)Q (3,A+, 3,a)	3 A- A2o	1 s 3 0	2nu2	1594.89888	1.8	2.18E-01	1.8	6.2	5
(P)P (2,E , 2,a)	1 E Ee	1 a 1-1	nu4	1595.07990	-2.8	5.35E-01	1.6	1.7	4
(Q)Q (5,E , 4,a)	5 E Ee	1 s 4 0	2nu2	1595.33476	-4.0	1.12E-02	2.2	-7.0	9
**(O)P (8,E , 8,s)	7 E Eo	5 a 6 1	nu4	1595.94998	1.2	2.53E-03	3.0	-10.3	3
(Q)Q (2,E , 2,a)	2 E Ee	1 s 2 0	2nu2	1596.05758	3.0	8.84E-02	2.9	8.2	7
(R)Q (8,E , 7,a)	8 E Eo	2 a 8 1	nu4	1596.41880	1.6	9.71E-02	1.7	0.8	6
(Q)Q (1,E , 1,a)	1 E Eo	1 s 1 0	2nu2	1596.64912	3.6	4.56E-02	3.9	3.6	11
(Q)Q (4,A-, 3,a)	4 A+ A2o	1 s 3 0	2nu2	1596.77124	-2.9	4.04E-02	3.6	-2.2	11
(R)Q (9,E , 7,s)	9 E Ee	4 s 8 1	nu4	1596.89620	1.1	5.85E-02	2.2	6.4	8
**(S)Q (6,E , 1,s)	6 E Ee	7 a 3-1	nu4	1597.09557	1.6	7.32E-03	3.5	-2.3	8
(R)Q (12,E , 8,a)	12 E Ee	7 a 9 1	nu4	1597.13161	-4.9	2.84E-03	3.1	1.6	4
(R)Q (11,E , 8,s)	11 E Eo	5 s 9 1	nu4	1597.29591	1.0	1.59E-02	3.6	4.3	6
**(S)Q (10,E , 2,s)	10 E Eo	12 a 4-1	nu4	1597.49047	-1.9	1.44E-03	3.9	-6.5	2
(Q)Q (3,E , 2,a)	3 E Ee	1 s 2 0	2nu2	1597.52415	-1.5	2.32E-02	3.6	-0.1	10
(R)Q (7,A+, 6,s)	7 A- A2o	1 s 7 1	nu4	1597.62150	-0.6	2.22E-01	1.5	5.7	6
(Q)Q (2,E , 1,a)	2 E Eo	1 s 1 0	2nu2	1597.64348	0.2	1.57E-02	3.5	10.0	7
**(O)P (6,A-, 6,s)	5 A- A2o	3 a 4 1	nu4	1597.91759	0.1	9.43E-03	3.7	2.5	9
**(O)P (4,E , 4,a)	3 E Ee	4 s 2 1	nu4	1597.96623	-2.3	4.05E-03	3.7	-2.0	5
(Q)Q (9,A-, 6,a)	9 A+ A2e	2 s 6 0	2nu2	1598.02637	-1.4	2.22E-02	2.7	12.4	11
**(S)Q (7,E , 1,a)	7 E Eo	8 s 3-1	nu4	1598.06997	-0.1	5.98E-03	3.1	-5.7	9
(R)Q (13,A-, 9,s)	13 A+ A2e	4 s10 1	nu4	1598.66879	-0.3	6.55E-03	3.8	18.9	8
**(O)P (5,E , 5,s)	4 E Ee	5 a 3 1	nu4	1599.09049	0.0	4.36E-03	3.6	-5.4	6
(Q)Q (3,E , 1,a)	3 E Eo	2 s 1 0	2nu2	1599.19809	-2.1	4.40E-03	3.3	13.2	5
(Q)Q (5,A+, 3,a)	5 A- A2o	2 s 3 0	2nu2	1599.30323	-5.7	1.96E-03	5.0	7.4	2
(Q)Q (4,E , 2,a)	4 E Ee	3 s 2 0	2nu2	1599.59541	-3.6	3.71E-03	3.5	-1.2	7
(Q)Q (10,E , 8,a)	10 E Ee	5 s 8 0	2nu2	1599.85823	-3.2	3.21E-02	1.6	0.8	4
(Q)Q (8,E , 5,a)	8 E Eo	5 s 5 0	2nu2	1600.38446	-1.6	1.06E-02	3.7	13.3	12
(R)Q (7,A-, 6,a)	7 A+ A2e	2 a 7 1	nu4	1600.58027	2.4	3.11E-01	0.3	5.6	5
**(O)P (3,A-, 3,s)	2 A- A2e	2 a 1 1	nu4	1600.67982	-3.9	4.78E-03	3.9	-4.9	8
**(S)Q (7,E , 1,s)	7 E Ee	8 a 3-1	nu4	1601.36672	1.8	6.81E-03	3.5	3.3	6
(R)Q (10,E , 7,s)	10 E Ee	6 s 8 1	nu4	1601.47043	1.0	3.12E-02	3.4	2.1	9
(R)Q (8,A-, 6,s)	8 A+ A2o	2 s 7 1	nu4	1601.49314	1.2	2.02E-01	1.3	7.1	6
(Q)Q (7,E , 4,a)	7 E Ee	4 s 4 0	2nu2	1601.91220	-1.9	6.28E-03	4.0	13.2	9
(R)Q (6,E , 5,s)	6 E Ee	2 s 6 1	nu4	1602.64505	-0.3	1.60E-01	1.3	3.9	7
(R)Q (10,A+, 6,a)	10 A- A2e	3 a 7 1	nu4	1602.97739	-2.2	1.84E-02	3.2	6.9	9
(R)Q (9,E , 7,a)	9 E Eo	4 a 8 1	nu4	1603.14683	-1.8	5.88E-02	3.8	-2.8	10
(R)Q (6,E , 5,a)	6 E Eo	3 a 6 1	nu4	1604.78726	2.7	2.18E-01	1.5	6.2	6
**(S)Q (2,A+, 0,a)	2 A- A2e	1 s 2-1	nu4	1604.80907	-1.4	6.27E-03	3.9	8.0	5
(Q)Q (9,E , 5,a)	9 E Eo	7 s 5 0	2nu2	1605.04586	-0.9	1.21E-02	2.0	10.6	11
(R)Q (9,A+, 6,s)	9 A- A2o	3 s 7 1	nu4	1605.52593	1.3	1.23E-01	2.3	6.0	8
(Q)Q (6,E , 2,a)	6 E Ee	6 s 2 0	2nu2	1605.77818	-0.8	1.47E-03	2.7	10.1	2
(R)Q (12,E , 7,a)	12 E Eo	8 a 8 1	nu4	1605.85293	-2.1	3.17E-03	2.4	10.6	3
(R)Q (7,E , 5,s)	7 E Ee	3 s 6 1	nu4	1605.96031	1.0	1.57E-01	1.9	4.2	7
(R)Q (11,E , 7,s)	11 E Ee	7 s 8 1	nu4	1606.09091	0.5	1.50E-02	2.8	7.7	11
(Q)Q (8,E , 4,a)	8 E Ee	6 s 4 0	2nu2	1606.27041	0.3	1.08E-02	3.4	10.9	12
(R)Q (8,A+, 6,a)	8 A- A2e	3 a 7 1	nu4	1606.31605	-0.4	2.18E-01	2.3	1.3	7
**(S)Q (8,E , 1,s)	8 E Ee	10 a 3-1	nu4	1606.46283	0.5	4.75E-03	2.6	-6.2	6
(Q)Q (11,E , 8,a)	11 E Ee	6 s 8 0	2nu2	1607.48898	-1.2	1.16E-02	3.5	-11.1	8
(R)Q (5,E , 4,s)	5 E Eo	2 s 5 1	nu4	1607.52511	-0.3	2.21E-01	1.6	5.0	4
**(S)Q (4,A+, 0,a)	4 A- A2e	2 s 2-1	nu4	1608.20239	-0.2	2.54E-02	3.0	-6.0	12
**(S)Q (3,A+, 0,s)	3 A- A2o	2 a 2-1	nu4	1608.23343	-1.8	1.78E-02	3.1	-1.5	10
(R)Q (11,A-, 6,a)	11 A+ A2e	4 a 7 1	nu4	1608.27054	-2.5	1.20E-02	2.3	9.2	10
(R)Q (5,E , 4,a)	5 E Ee	2 a 5 1	nu4	1609.06118	2.5	2.70E-01	1.8	1.7	6
(R)Q (8,E , 5,s)	8 E Ee	5 s 6 1	nu4	1609.46549	1.0	1.04E-01	1.3	1.3	4
(R)Q (7,E , 5,a)	7 E Eo	5 a 6 1	nu4	1609.50642	0.6	1.81E-01	2.0	2.0	5
(R)Q (10,A-, 6,s)	10 A+ A2o	4 s 7 1	nu4	1609.63668	0.8	5.84E-02	3.9	1.3	9
(Q)Q (7,E , 2,a)	7 E Ee	7 s 2 0	2nu2	1609.95897	2.4	3.60E-03	3.3	10.2	6
(P)P (1,E , 1,s)	0 E Ee	1 s 0 1	nu4	1610.10146	-1.3	2.01E-01	2.9	-0.6	7
(R)Q (10,E , 5,a)	10 E Eo	9 a 6 1	nu4	1610.14172	-1.8	9.83E-03	3.8	11.7	10
(R)Q (6,E , 4,s)	6 E Eo	4 s 5 1	nu4	1610.30236	0.6	2.36E-01	2.2	3.7	7
(P)P (1,E , 1,a)	0 E Eo	1 a 0 1	nu4	1610.40837	-2.6	2.00E-01	2.5	-0.6	7
(R)Q (12,E , 7,s)	12 E Ee	10 s 8 1	nu4	1610.68681	-0.1	5.31E-03	2.3	-1.1	5
(Q)Q (8,A-, 3,a)	8 A+ A2o	4 s 3 0	2nu2	1611.15374	1.7	1.69E-02	3.8	9.2	11
(Q)Q (9,E , 4,a)	9 E Ee	8 s 4 0	2nu2	1611.19372	0.0	1.11E-02	3.8	8.0	11
(R)Q (9,A-, 6,a)	9 A+ A2e	3 a 7 1	nu4	1612.12296	-1.3	1.14E-01	2.7	0.9	8
(R)Q (4,A+, 3,s)	4 A- A2e	1 s 4 1	nu4	1612.26753	-0.5	5.72E-01	1.8	5.8	4
(R)Q (6,E , 4,a)	6 E Ee	4 a 5 1	nu4	1612.81742	1.1	2.71E-01	2.6	1.3	6
(R)Q (9,E , 5,s)	9 E Ee	7 s 6 1	nu4	1613.07530	0.7	5.78E-02	3.6	2.2	11
(R)Q (7,E , 4,s)	7 E Eo	6 s 5 1	nu4	1613.29217	0.5	1.78E-01	2.1	4.4	6
(R)Q (4,A-, 3,a)	4 A+ A2o	2 a 4 1	nu4	1613.37098	1.7	6.68E-01	2.0	4.0	4
**(S)Q (5,A+, 0,s)	5 A- A2o	4 a 2-1	nu4	1613.39706	1.7	3.90E-02	3.0	-3.7	8
(R)Q (12,A+, 6,a)	12 A- A2e	5 a 7 1	nu4	1613.60406	2.1	5.60E-03	3.3	1.6	4
(R)Q (11,A+, 6,s)	11 A- A2o	5 s 7 1	nu4	1613.75313	0.6	2.56E-02	2.6	3.5	10
**(S)Q (6,A+, 0,a)	6 A- A2e	4 s 2-1	nu4	1613.87187	1.1	3.65E-02	3.6	-5.4	10
(R)Q (8,E , 5,a)	8 E Eo	6 a 6 1	nu4	1614.34521	-0.6	1.09E-01	3.4	1.7	8
(R)Q (5,A-, 3,s)	5 A+ A2e	2 s 4 1	nu4	1614.52314	0.0	6.79E-01	1.6	5.7	4
(Q)Q (8,E , 2,a)	8 E Ee	9 s 2 0	2nu2	1614.85428	3.0	4.70E-03	1.5	4.5	7
(R)Q (13,E , 7,s)	13 E Ee	12 s 8 1	nu4	1615.20357	-0.6	1.92E-03	0.4	5.0	2
(R)Q (5,A+, 3,a)	5 A- A2o	3 a 4 1	nu4	1616.26607	0.9	7.67E-01	1.2	3.4	3

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(Q)Q (9,A+, 3,a) 9 A- A2o	5 s 3 0	2nu2	1616.35111	0.9	1.73E-02	2.9	4.8	8
(R)Q (8,E , 4,s) 8 E Eo	7 s 5 1	nu4	1616.40663	0.2	1.07E-01	2.6	3.0	3
(R)Q (10,E , 4,a) 10 E Ee	10 a 5 1	nu4	1616.42118	-1.7	9.68E-03	3.8	14.8	4
(R)Q (6,A+, 3,s) 6 A- A2e	3 s 4 1	nu4	1617.00681	-0.4	5.57E-01	1.4	4.6	3
(Q)R (0,A+, 0,a) 1 A+ A2e	1 s 0 0	2nu2	1617.05576	3.9	8.92E-02	2.5	6.1	5
(Q)Q (8,E , 1,a) 8 E Eo	11 s 1 0	2nu2	1617.28516	5.9	1.24E-03	2.2	10.0	2
(R)Q (3,E , 2,a) 3 E Ee	3 a 3 1	nu4	1617.67315	0.9	3.69E-01	2.7	1.2	6
(R)Q (12,A-, 6,s) 12 A+ A2o	6 s 7 1	nu4	1617.81837	0.2	9.75E-03	3.5	5.4	10
(R)Q (4,E , 2,s) 4 E Eo	4 s 3 1	nu4	1618.62494	-0.7	4.35E-01	0.6	3.0	3
(R)Q (6,A-, 3,a) 6 A+ A2o	3 a 4 1	nu4	1619.31622	-0.5	6.16E-01	0.8	3.2	3
**(*)Q (9,E , 5,a) 9 E Eo	8 * * *	**	1619.37210	-0.3	5.00E-02	3.4	-3.5	5
(R)Q (9,E , 4,s) 9 E Eo	9 s 5 1	nu4	1619.56890	0.5	5.49E-02	3.4	1.2	9
(R)Q (7,A-, 3,s) 7 A+ A2e	4 s 4 1	nu4	1619.62296	-0.7	3.79E-01	1.4	5.0	5
(R)Q (4,E , 2,a) 4 E Ee	5 a 3 1	nu4	1619.80690	0.3	4.91E-01	1.3	2.9	3
(R)Q (11,E , 5,s) 11 E Ee	11 s 6 1	nu4	1620.32821	1.4	1.20E-02	3.4	8.7	8
(R)Q (5,E , 2,s) 5 E Eo	6 s 3 1	nu4	1620.60142	-1.2	4.09E-01	1.1	4.5	5
(R)Q (8,E , 4,a) 8 E Ee	7 a 5 1	nu4	1620.74401	-0.2	1.08E-01	2.5	2.2	7
(R)Q (2,E , 1,s) 2 E Ee	2 s 2 1	nu4	1621.35884	-1.2	3.66E-01	1.4	1.6	5
(R)Q (11,E , 4,a) 11 E Ee	12 a 5 1	nu4	1621.54168	-0.4	6.01E-03	3.8	12.5	8
(R)Q (10,A-, 3,a) 10 A+ A2o	6 a 4 1	nu4	1621.76121	-4.0	1.54E-02	3.7	3.8	9
**(S)Q (8,A+, 0,a) 8 A- A2e	6 s 2-1	nu4	1621.95239	2.6	3.56E-02	1.7	-1.6	8
(R)Q (5,E , 2,a) 5 E Ee	6 a 3 1	nu4	1622.08705	-1.2	4.49E-01	1.0	2.9	4
(R)Q (8,A+, 3,s) 8 A- A2e	5 s 4 1	nu4	1622.29993	-0.9	2.23E-01	0.9	6.6	5
(R)Q (7,A+, 3,a) 7 A- A2o	4 a 4 1	nu4	1622.42647	-1.4	3.99E-01	2.5	3.2	4
(R)Q (6,E , 2,s) 6 E Eo	8 s 3 1	nu4	1622.70842	-1.7	3.05E-01	0.4	3.4	4
(R)Q (10,E , 4,s) 10 E Eo	11 s 5 1	nu4	1622.72144	1.3	2.71E-02	3.8	9.0	5
(R)Q (12,E , 5,s) 12 E Ee	13 s 6 1	nu4	1623.87537	-0.1	4.39E-03	2.9	8.8	4
(Q)Q (11,A-, 6,a) 11 A+ A2e	5 s 6 0	2nu2	1624.64589	1.1	1.58E-02	3.4	-0.3	9
**(*)Q (10,E , 5,a) 10 E Eo	10 * * *	**	1624.73415	0.3	1.99E-02	3.2	-1.8	0
(R)Q (4,E , 1,a) 4 E Eo	5 a 2 1	nu4	1624.86273	-1.4	6.40E-01	3.1	4.4	4
(R)Q (7,E , 2,s) 7 E Eo	10 s 3 1	nu4	1624.89556	-0.1	1.89E-01	2.0	3.1	6
(R)Q (1,A+, 0,s) 1 A- A2o	1 s 1 1	nu4	1625.46453	-2.5	1.21E+00	1.4	1.9	3
(R)Q (5,E , 1,s) 5 E Ee	7 s 2 1	nu4	1625.51711	-3.9	4.89E-01	2.0	3.5	4
(R)Q (8,A-, 3,a) 8 A+ A2o	5 a 4 1	nu4	1625.60930	1.1	2.18E-01	1.5	3.2	5
(R)Q (11,E , 4,s) 11 E Eo	13 s 5 1	nu4	1625.83006	2.0	1.04E-02	3.4	4.3	9
(R)Q (2,A+, 0,a) 2 A- A2e	2 a 1 1	nu4	1626.12880	-3.5	1.67E+00	0.9	3.0	2
(R)Q (7,E , 2,a) 7 E Ee	9 a 3 1	nu4	1626.67159	-1.4	2.04E-01	3.4	1.4	6
(R)Q (11,A+, 3,a) 11 A- A2o	7 a 4 1	nu4	1626.82588	2.1	1.09E-02	2.8	4.8	9
(R)Q (8,E , 2,s) 8 E Eo	10 s 3 1	nu4	1626.93171	-3.6	1.05E-01	2.0	2.9	7
(R)Q (6,E , 1,s) 6 E Ee	9 s 2 1	nu4	1627.04778	-4.3	3.50E-01	1.4	4.3	5
(R)Q (4,A+, 0,a) 4 A- A2e	3 a 1 1	nu4	1627.32144	-6.3	1.53E+00	2.2	4.0	3
(R)Q (10,A+, 3,s) 10 A- A2e	7 s 4 1	nu4	1627.62907	0.4	4.75E-02	3.6	2.5	5
(R)Q (7,E , 1,s) 7 E Ee	10 s 2 1	nu4	1628.61048	-3.1	2.12E-01	0.9	3.4	6
**(P)Q (8,E , 2,s) 8 E Eo	11 s 1 0	2nu2	1628.63689	6.4	3.85E-03	3.5	7.6	4
(R)Q (12,E , 4,s) 12 E Eo	15 s 5 1	nu4	1628.88243	-0.3	3.51E-03	1.2	-0.8	4
**(*)Q (9,A+, 3,a) 9 A- A2o	6 * * *	**	1628.92256	0.1	9.58E-02	2.3	1.2	7
(R)Q (8,E , 2,a) 8 E Ee	11 a 3 1	nu4	1628.96950	0.9	1.09E-01	1.9	1.5	7
(R)Q (9,E , 2,s) 9 E Eo	12 s 3 1	nu4	1629.11285	-0.3	5.33E-02	3.4	3.4	9
(R)Q (6,A+, 0,a) 6 A- A2e	5 a 1 1	nu4	1629.19084	-6.7	7.50E-01	2.4	4.6	4
(R)Q (7,E , 1,a) 7 E Eo	11 a 2 1	nu4	1629.31306	0.8	2.15E-01	3.7	1.5	7
(Q)Q (10,E , 1,a) 10 E Eo	15 s 1 0	2nu2	1629.36371'	-7.9	3.60E-03	3.3	8.2	5
**(*)Q (10,E , 4,a) 10 E Ee	11 * * *	**	1629.59347	-0.8	1.80E-02	2.4	-0.4	1
**(Q)Q (4,E , 1,s) 4 E Ee	7 a 1-1	nu4	1629.71463	2.2	2.61E-03	2.8	-6.0	5
(R)Q (11,A-, 3,s) 11 A+ A2e	8 s 4 1	nu4	1630.22217	6.6	1.86E-02	2.1	1.4	4
(R)Q (8,E , 1,s) 8 E Ee	12 s 2 1	nu4	1630.23355	-0.6	1.14E-01	2.9	4.3	7
(R)Q (7,A+, 0,s) 7 A- A2o	6 s 1 1	nu4	1630.30885	-5.4	4.14E-01	1.9	4.8	4
(P)Q (1,E , 1,s) 1 E Ee	2 s 0 1	nu4	1630.45751	-0.6	2.67E-01	2.4	-0.4	6
(Q)Q (11,E , 5,a) 11 E Eo	12 s 5 0	2nu2	1630.67485	-4.7	6.17E-03	3.4	-2.0	6
(R)Q (10,A+, 0,a) 10 A- A2e	8 a 1 1	nu4	1630.72280	1.5	3.07E-02	2.6	-3.8	6
(P)Q (1,E , 1,a) 1 E Eo	3 a 0 1	nu4	1630.85087	-1.4	2.50E-01	3.0	-2.4	7
(R)Q (8,E , 1,a) 8 E Eo	12 a 2 1	nu4	1630.88848	3.7	1.13E-01	2.1	2.0	8
(R)Q (9,A+, 0,s) 9 A- A2o	7 s 1 1	nu4	1630.94692	3.9	8.98E-02	2.9	2.0	8
(R)Q (11,E , 2,a) 11 E Ee	15 a 3 1	nu4	1631.11477	-1.6	5.79E-03	2.8	9.4	8
(R)Q (10,E , 2,s) 10 E Eo	14 s 3 1	nu4	1631.27704	2.4	2.28E-02	3.5	2.2	11
**(*)Q (9,E , 2,a) 9 E Ee	13 * * *	**	1631.42230	2.8	5.54E-02	2.2	13.0	2
(Q)Q (12,A+, 6,a) 12 A- A2e	6 s 6 0	2nu2	1631.76583	4.0	4.12E-03	3.7	-4.2	8
(R)Q (8,A+, 0,a) 8 A- A2e	7 a 1 1	nu4	1631.88397	-6.5	2.10E-01	0.9	5.1	4
(R)Q (9,E , 1,s) 9 E Ee	14 s 2 1	nu4	1631.96193	2.8	5.18E-02	3.2	2.4	9
(P)Q (2,E , 1,a) 2 E Eo	4 a 0 1	nu4	1632.05719	0.1	2.80E-01	3.7	-1.8	5
**(*)Q (9,E , 1,a) 9 E Eo	14 * * *	**	1632.63263	5.5	5.24E-02	3.1	3.2	9
**(*)Q (10,A-, 3,a) 10 A+ A2o	7 * * *	**	1632.83115	1.0	3.43E-02	3.9	0.3	0
(R)Q (12,A+, 3,s) 12 A- A2e	9 s 4 1	nu4	1632.87338	-6.6	7.08E-03	2.8	10.9	10
(P)Q (3,E , 1,s) 3 E Ee	6 s 0 1	nu4	1632.99920	1.1	2.57E-01	3.6	-1.9	7
(R)Q (11,E , 2,s) 11 E Eo	16 s 3 1	nu4	1633.48190	3.9	9.13E-03	3.7	6.8	8
(P)Q (3,E , 1,a) 3 E Eo	6 a 0 1	nu4	1634.06701	2.6	2.06E-01	2.8	-1.3	7
(R)Q (11,E , 1,a) 11 E Eo	17 a 2 1	nu4	1634.53031	0.1	5.86E-03	3.9	5.1	8
(R)Q (12,E , 2,a) 12 E Ee	17 a 3 1	nu4	1634.72233	0.4	2.61E-03	1.7	2.8	5
(P)Q (10,E , 1,a) 10 E Eo	16 a 0 1	nu4	1634.83048	0.5	1.87E-02	3.2	1.2	7
(Q)Q (11,E , 4,a) 11 E Ee	13 s 4 0	2nu2	1635.01127	-13.0	5.80E-03	1.0	11.6	2
**(S)Q (9,A+, 0,s) 9 A- A2o	8 a 2-1	nu4	1635.67012	-6.0	2.47E-02	1.8	10.2	2
(R)Q (12,E , 2,s) 12 E Eo	17 s 3 1	nu4	1635.77937	-6.8	2.80E-03	2.4	1.9	2
(P)Q (3,E , 2,s) 3 E Eo	5 s 1-1	nu4	1636.88755	-0.6	2.61E-01	1.7	-1.5	6
(P)Q (4,E , 1,a) 4 E Eo	7 a 0 1	nu4	1637.02896	5.1	1.08E-01	2.2	-1.2	7
**(*)Q (10,A+, 0,a) 10 A- A2e	9 * * *	**	1637.11861	-12.7	1.68E-02	3.3	6.0	9
(Q)R (1,E , 1,a) 2 E Eo	1 s 1 0	2nu2	1637.38951	0.4	7.09E-02	5.2	-2.4	2

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(P)Q (5,E , 1,s) 5 E Ee	9 s 0 1	nu4	1638.31879	4.2	7.62E-02	1.4	-2.5	6
(P)Q (4,E , 2,s) 4 E Eo	6 s 1-1	nu4	1638.86779	-0.7	2.05E-01	2.0	-2.2	7
(Q)Q (13,A-, 6,a) 13 A+ A2e	7 s 6 0	2nu2	1639.69047	26.3	1.08E-03	2.1	12.5	2
(P)Q (4,E , 2,a) 4 E Ee	7 a 1-1	nu4	1640.06776	2.0	1.64E-01	2.9	-0.6	6
(P)Q (3,A+, 3,a) 3 A- A2o	2 a 2-1	nu4	1640.81344	-1.9	2.98E-01	1.1	-1.6	5
(P)Q (5,E , 1,a) 5 E Eo	9 a 0 1	nu4	1640.99234	5.6	4.34E-02	3.6	-2.0	10
(P)Q (5,E , 2,s) 5 E Eo	8 s 1-1	nu4	1641.48723	-0.7	1.27E-01	1.4	-2.5	8
(P)Q (4,A+, 3,s) 4 A- A2e	2 s 2-1	nu4	1642.16533	-0.1	3.74E-01	0.0	1.3	2
(P)Q (4,A-, 3,a) 4 A+ A2o	3 a 2-1	nu4	1642.99367	-0.1	3.11E-01	0.8	0.2	4
(P)Q (5,E , 2,a) 5 E Ee	8 a 1-1	nu4	1643.36976	3.3	9.01E-02	2.0	-0.2	7
(P)Q (6,E , 2,s) 6 E Eo	10 s 1-1	nu4	1644.80480	-0.8	6.38E-02	3.0	-2.2	9
(P)Q (4,E , 4,s) 4 E Eo	2 s 3-1	nu4	1645.09921	0.2	1.11E-01	1.0	-6.3	8
(P)Q (4,E , 4,a) 4 E Ee	4 a 3-1	nu4	1645.57625	-2.0	9.54E-02	2.5	-5.8	5
**(O)Q (4,E , 2,a) 4 E Ee	8 s 0 1	nu4	1645.62385	2.6	4.74E-03	2.3	-9.4	5
(P)Q (6,E , 1,a) 6 E Eo	11 a 0 1	nu4	1645.90324	3.7	1.52E-02	3.1	2.7	5
**(S)R (1,A+, 0,s) 2 A+ A2o	1 a 2-1	nu4	1646.40418	-3.2	3.43E-03	2.6	-11.5	3
(R)R (0,A+, 0,a) 1 A+ A2e	2 a 1 1	nu4	1646.49176	1.4	7.24E-01	1.3	-0.4	3
(P)Q (7,E , 1,s) 7 E Ee	12 s 0 1	nu4	1646.74201	2.7	1.02E-02	4.0	-3.7	10
(Q)P (11,E , 5,s) 10 E Ee	20 a 5 0	2nu2	1647.00412	-0.8	2.29E-04	3.8	-7.5	2
(P)Q (5,E , 4,s) 5 E Eo	4 s 3-1	nu4	1647.30914	-0.1	1.08E-01	2.1	-7.8	2
(P)Q (6,E , 2,a) 6 E Ee	10 a 1-1	nu4	1647.59170	2.6	3.68E-02	3.5	-5.1	9
(Q)P (11,A+, 6,s) 10 A+ A2o	10 a 6 0	2nu2	1647.83085	-0.1	5.15E-04	1.2	-0.9	2
(P)Q (5,E , 4,a) 5 E Ee	5 a 3-1	nu4	1648.16595	0.1	9.11E-02	2.0	-3.3	3
**(S)R (3,E , 2,a) 4 E Ee	2 s 4-1	nu4	1648.26882	0.5	4.58E-03	3.7	6.6	3
**(O)Q (5,E , 2,a) 5 E Ee	9 s 0 1	nu4	1648.67032	4.1	4.68E-03	3.0	-4.6	5
**(O)Q (4,E , 2,s) 4 E Eo	7 a 0 1	nu4	1648.81124	5.1	3.41E-03	2.9	-9.7	5
(P)Q (7,E , 2,s) 7 E Eo	12 s 1-1	nu4	1648.85313	-1.4	2.71E-02	2.3	0.1	7
(P)Q (6,A-, 3,a) 6 A+ A2o	4 a 2-1	nu4	1649.55786	1.8	1.08E-01	2.1	0.7	7
(P)Q (5,E , 5,s) 5 E Ee	3 s 4-1	nu4	1649.71418	0.3	6.98E-02	3.6	-7.8	8
**(S)R (4,A-, 3,a) 5 A- A2o	1 s 5-1	nu4	1649.93680	2.0	1.14E-02	3.3	3.7	10
(P)Q (6,E , 4,s) 6 E Eo	6 s 3-1	nu4	1650.04952	0.0	7.45E-02	1.9	-4.1	9
**(S)R (3,E , 2,s) 4 E Eo	1 a 4-1	nu4	1650.09453	-3.8	4.48E-03	2.8	0.1	6
(P)Q (5,E , 5,a) 5 E Eo	3 a 4-1	nu4	1650.19853	-2.1	5.93E-02	3.9	-4.5	11
(Q)P (11,E , 8,s) 10 E Eo	17 a 8 0	2nu2	1650.76108	0.6	2.63E-04	3.6	-3.7	3
(P)Q (7,A-, 3,s) 7 A+ A2e	6 s 2-1	nu4	1651.19295	3.9	7.04E-02	0.9	-2.0	8
(P)Q (6,E , 4,a) 6 E Ee	7 a 3-1	nu4	1651.43513	1.3	5.68E-02	3.7	-0.9	9
**(S)R (5,E , 4,a) 6 E Ee	1 s 6-1	nu4	1651.47138	2.6	5.90E-03	3.5	-0.4	7
(P)Q (7,E , 1,a) 7 E Eo	13 a 0 1	nu4	1651.66801	-0.7	4.26E-03	2.9	0.9	8
**(S)R (4,A+, 3,s) 5 A+ A2e	1 a 5-1	nu4	1651.76226	-4.0	1.15E-02	3.8	0.6	9
(P)Q (8,E , 1,s) 8 E Ee	14 s 0 1	nu4	1652.01237	0.3	3.22E-03	2.9	0.2	3
(P)Q (6,E , 5,s) 6 E Ee	5 s 4-1	nu4	1652.29215	-0.5	6.04E-02	3.9	-12.1	5
**(O)Q (6,E , 2,a) 6 E Ee	11 s 0 1	nu4	1652.50254	4.2	3.55E-03	1.5	-2.0	3
(P)Q (7,E , 2,a) 7 E Ee	11 a 1-1	nu4	1652.73754	-0.2	1.35E-02	3.3	0.7	8
**(S)R (6,E , 5,a) 7 E Eo	2 s 7-1	nu4	1652.87052	3.8	6.09E-03	3.5	8.6	5
(P)Q (6,E , 5,a) 6 E Eo	5 a 4-1	nu4	1653.18497	-0.1	4.92E-02	2.8	-6.3	5
**(S)R (5,E , 4,s) 6 E Eo	1 a 6-1	nu4	1653.30622	-4.4	6.34E-03	3.9	3.5	3
(P)Q (7,E , 4,s) 7 E Eo	8 s 3-1	nu4	1653.35547	0.1	3.73E-02	2.7	-7.6	6
(P)Q (8,E , 2,s) 8 E Eo	13 s 1-1	nu4	1653.62706	-2.4	9.36E-03	3.1	-0.9	7
(P)Q (7,A+, 3,a) 7 A- A2o	5 a 2-1	nu4	1653.78725	2.7	3.64E-02	3.5	1.4	10
**(S)R (7,A-, 6,a) 8 A- A2e	1 s 8-1	nu4	1654.13000	4.5	9.84E-03	2.8	5.1	4
(P)Q (6,A-, 6,s) 6 A+ A2o	1 s 5-1	nu4	1654.20853	0.7	8.26E-02	2.3	-7.8	4
(P)Q (6,A+, 6,a) 6 A- A2e	2 a 5-1	nu4	1654.69440	-1.9	6.59E-02	2.9	-7.1	5
**(S)R (6,E , 5,s) 7 E Ee	1 a 7-1	nu4	1654.72422	-3.9	5.34E-03	3.7	-7.1	4
(P)Q (8,A+, 3,s) 8 A- A2e	6 s 2-1	nu4	1655.01799	2.8	2.34E-02	2.1	3.1	9
**(S)R (8,E , 7,a) 9 E Eo	1 s 9-1	nu4	1655.24655	4.7	3.92E-03	3.5	9.7	7
(P)Q (7,E , 5,s) 7 E Ee	6 s 4-1	nu4	1655.38571	-0.7	3.83E-02	3.5	-5.8	12
(P)Q (7,E , 4,a) 7 E Ee	8 a 3-1	nu4	1655.44883	1.5	2.67E-02	2.8	1.8	12
**(S)R (7,A+, 6,s) 8 A+ A2o	1 a 8-1	nu4	1656.01171	-3.9	9.94E-03	2.9	3.8	9
**(S)R (9,E , 8,a) 10 E Ee	2 s10-1	nu4	1656.21746	4.9	2.68E-03	3.7	8.6	4
(P)Q (7,E , 5,a) 7 E Eo	7 a 4-1	nu4	1656.82971	1.2	2.85E-02	1.8	-0.3	12
(Q)R (2,E , 2,a) 3 E Ee	1 s 2 0	2nu2	1657.12072	-1.4	9.72E-02	3.5	0.8	6
(P)Q (7,A+, 6,s) 7 A- A2o	2 s 5-1	nu4	1657.13232	-0.8	7.20E-02	2.5	-0.5	5
(P)Q (8,E , 4,s) 8 E Eo	9 s 3-1	nu4	1657.25251	0.8	1.63E-02	2.2	-2.9	11
**(O)Q (6,E , 2,s) 6 E Eo	11 a 0 1	nu4	1657.49312	3.6	2.53E-03	3.4	-10.5	6
(P)Q (7,A-, 6,a) 7 A+ A2e	3 a 5-1	nu4	1658.05049	0.2	5.36E-02	3.9	0.7	11
(P)Q (7,E , 7,s) 7 E Ee	2 s 6-1	nu4	1658.58886	0.6	2.39E-02	1.9	-2.6	12
**(O)Q (3,A+, 3,a) 3 A- A2o	3 s 1 1	nu4	1658.93181	-5.1	4.48E-03	3.3	3.7	7
(P)Q (8,E , 5,s) 8 E Ee	8 s 4-1	nu4	1659.02202	-0.6	1.86E-02	2.3	-1.4	8
(Q)R (2,A+, 0,a) 3 A+ A2e	1 s 0 0	2nu2	1659.32992	-2.3	2.46E-01	2.1	6.3	4
(P)Q (8,A-, 3,a) 8 A+ A2o	6 a 2-1	nu4	1659.50921	-2.5	1.52E-02	3.1	8.2	11
(P)Q (8,E , 4,a) 8 E Ee	10 a 3-1	nu4	1660.25079	0.3	9.90E-03	3.6	6.3	10
**(O)Q (5,A+, 3,a) 5 A- A2o	5 s 1 1	nu4	1660.35391	-6.7	1.29E-02	3.3	-8.2	10
(P)Q (8,A-, 6,s) 8 A+ A2o	3 s 5-1	nu4	1660.55697	-0.3	3.73E-02	1.5	-4.3	2
(R)R (1,E , 1,s) 2 E Ee	2 s 2 1	nu4	1661.12480	-1.0	4.99E-01	0.2	-0.4	4
(P)Q (8,E , 5,a) 8 E Eo	8 a 4-1	nu4	1661.18724	1.3	1.30E-02	2.4	10.1	5
**(O)Q (4,A+, 3,s) 4 A- A2e	3 a 1 1	nu4	1661.28432	-6.2	8.71E-03	3.4	-2.6	6
(R)R (1,E , 1,a) 2 E Eo	2 a 2 1	nu4	1661.67496	-0.2	4.61E-01	1.3	0.9	4
(P)Q (8,E , 7,s) 8 E Ee	4 s 6-1	nu4	1661.83738	-1.1	1.69E-02	3.8	-5.6	9
(P)Q (8,A+, 6,a) 8 A- A2e	4 a 5-1	nu4	1662.04371	1.4	2.72E-02	2.3	4.9	12
**(O)Q (7,A+, 3,a) 7 A- A2o	6 s 1 1	nu4	1662.47902	-5.4	1.33E-02	2.7	-8.2	10
(P)Q (8,E , 8,s) 8 E Eo	3 s 7-1	nu4	1662.86283	0.6	1.15E-02	2.1	-9.5	6
**(O)Q (7,E , 2,s) 7 E Eo	13 a 0 1	nu4	1663.14266	-1.5	1.85E-03	7.3	-0.4	2
(P)Q (9,E , 5,s) 9 E Ee	10 s 4-1	nu4	1663.21874	-0.3	7.30E-03	4.0	2.4	8
(P)Q (8,E , 8,a) 8 E Ee	3 a 7-1	nu4	1663.34044	-1.5	9.07E-03	3.2	0.6	7
(P)Q (10,E , 1,s) 10 E Ee	18 s 0 1	nu4	1664.36118	-8.2	2.70E-04	1.3	2.5	2

(I)		(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(P)Q (9,A+, 6,s)	9 A- A2o	4 s 5-1	nu4	1664.49937	-1.4	1.62E-02	2.2	0.0	10
**(O)Q (8,A+, 3,s)	8 A- A2e	7 a 1 1	nu4	1664.94918	-6.6	9.19E-03	2.2	-10.1	10
(P)Q (10,E , 2,s)	10 E Eo	18 s 1-1	nu4	1665.17233	-0.9	7.49E-04	2.1	3.9	2
**(Q)R (1,E , 1,s)	2 E Ee	3 a 1-1	nu4	1665.32884	-1.0	9.06E-04	0.4	7.3	2
**(S)R (2,A+, 0,a)	3 A+ A2e	2 s 2-1	nu4	1665.80704	-1.0	8.97E-03	2.6	5.1	11
(P)Q (9,E , 4,a)	9 E Ee	12 a 3-1	nu4	1665.84447	-1.7	3.06E-03	3.4	19.5	7
**(U)R (7,A-, 3,s)	8 A- A2e	3 a 7 1	nu4	1666.16571	0.4	3.00E-04	3.8	17.2	2
(P)Q (9,E , 5,a)	9 E Eo	10 a 4-1	nu4	1666.29641	-0.3	4.24E-03	3.8	13.8	10
(P)Q (9,E , 8,s)	9 E Eo	5 s 7-1	nu4	1666.41483	-1.5	7.82E-03	3.4	-4.6	10
(P)Q (9,A-, 6,a)	9 A+ A2e	4 a 5-1	nu4	1666.72033	1.1	1.02E-02	2.0	9.0	11
(P)Q (10,E , 4,s)	10 E Eo	13 s 3-1	nu4	1666.79085	2.0	1.66E-03	2.1	4.8	3
(P)Q (9,A-, 9,s)	9 A+ A2e	1 s 8-1	nu4	1667.03750	0.6	1.15E-02	3.4	-4.1	10
(P)Q (9,E , 7,a)	9 E Eo	6 a 6-1	nu4	1667.08983	1.7	6.27E-03	3.5	15.7	7
(Q)P (10,E , 1,s)	9 E Ee	19 a 1 0	2nu2	1667.80073	-0.3	4.00E-04	2.4	-10.0	3
**(S)R (3,E , 1,a)	4 E Eo	2 s 3-1	nu4	1668.17794	-0.8	4.72E-03	3.1	1.8	7
(Q)P (10,E , 4,s)	9 E Eo	18 a 4 0	2nu2	1668.83107	-1.1	4.59E-04	2.7	-3.0	3
(P)Q (10,A-, 6,s)	10 A+ A2o	5 s 5-1	nu4	1668.97397	-1.0	5.35E-03	2.9	-1.2	8
**(*)Q (10,A+, 3,s)	10 A- A2e	9 * * *	**	1669.59380	-12.3	4.37E-03	3.8	11.0	4
(P)Q (10,E , 7,s)	10 E Ee	8 s 6-1	nu4	1669.79559	-2.0	3.31E-03	1.5	4.4	4
**(S)R (3,E , 1,s)	4 E Ee	4 a 3-1	nu4	1670.20317	-1.7	4.69E-03	2.3	-3.2	6
(Q)P (10,A-, 6,s)	9 A- A2o	9 a 6 0	2nu2	1670.71823	-1.4	9.40E-04	1.3	-5.2	3
(P)Q (10,E ,10,s)	10 E Eo	2 s 9-1	nu4	1671.11955	0.2	2.82E-03	2.4	6.3	2
(P)R (1,E , 1,s)	2 E Ee	4 s 0 1	nu4	1671.19544	0.1	8.96E-02	2.8	-7.9	5
(P)R (1,E , 1,a)	2 E Eo	4 a 0 1	nu4	1671.80315	0.2	8.87E-02	1.6	-6.5	5
(P)Q (10,E , 8,a)	10 E Ee	7 a 7-1	nu4	1671.97997	2.2	2.20E-03	2.7	11.6	3
(P)Q (10,E , 7,a)	10 E Eo	7 a 6-1	nu4	1672.06111	0.9	1.81E-03	3.4	9.8	2
**(S)R (4,E , 2,s)	5 E Eo	3 a 4-1	nu4	1672.45730	-1.7	6.88E-03	2.9	2.3	6
**(S)R (5,A+, 3,a)	6 A+ A2o	1 s 5-1	nu4	1672.55560	0.0	1.42E-02	3.3	-2.5	11
**(O)Q (6,A-, 3,a)	6 A+ A2o	5 s 1 1	nu4	1673.17082	5.9	7.82E-03	4.0	-4.2	8
**(O)Q (5,A-, 3,s)	5 A+ A2e	5 a 1 1	nu4	1673.62162	7.4	7.19E-03	3.4	-8.1	10
(P)Q (11,A+, 6,s)	11 A- A2o	6 s 5-1	nu4	1673.97546	0.1	1.62E-03	2.2	10.1	3
**(S)R (6,E , 4,a)	7 E Ee	2 s 6-1	nu4	1674.55304	0.3	6.94E-03	3.3	0.4	10
**(S)R (5,A-, 3,s)	6 A- A2e	2 a 5-1	nu4	1674.58813	-1.7	1.48E-02	2.7	-1.1	5
(Q)R (3,A+, 3,a)	4 A+ A2o	1 s 3 0	2nu2	1676.20133	-2.8	2.59E-01	2.1	4.1	5
**(S)R (7,E , 5,a)	8 E Eo	3 s 7-1	nu4	1676.41976	0.5	5.34E-03	3.2	-8.3	6
(R)R (2,E , 2,s)	3 E Eo	3 s 3 1	nu4	1676.50386	-0.6	7.58E-01	2.4	1.7	4
(R)R (2,E , 2,a)	3 E Ee	3 a 3 1	nu4	1677.26947	0.7	6.81E-01	1.4	1.0	4
**(S)R (8,A+, 6,a)	9 A+ A2e	1 s 8-1	nu4	1678.15288	0.2	8.85E-03	3.9	1.8	9
**(S)R (7,E , 5,s)	8 E Ee	3 a 7-1	nu4	1678.47643	-1.1	6.07E-03	3.5	2.9	4
(Q)R (3,E , 2,a)	4 E Ee	3 s 2 0	2nu2	1678.96493	-3.4	1.34E-01	2.2	3.1	7
**(O)Q (5,E , 4,a)	5 E Ee	7 s 2 1	nu4	1680.07724	-3.8	3.54E-03	3.4	2.6	7
**(S)R (8,A-, 6,s)	9 A- A2o	2 a 8-1	nu4	1680.23061	-0.6	8.82E-03	3.4	-0.1	7
(Q)R (3,E , 1,a)	4 E Eo	3 s 1 0	2nu2	1680.70270	-3.1	1.22E-01	1.1	0.9	4
**(O)Q (4,E , 4,s)	4 E Eo	5 a 2 1	nu4	1681.11599	-1.5	1.71E-03	0.9	2.3	2
**(S)R (10,E , 8,a)	11 E Ee	3 s10-1	nu4	1681.21006	-0.7	1.84E-03	2.3	-0.6	3
(P)Q (11,A+, 3,a)	11 A- A2o	10 a 2-1	nu4	1681.33527	16.7	2.60E-04	2.5	3.9	2
**(O)Q (6,E , 4,a)	6 E Ee	9 s 2 1	nu4	1681.38727	-4.6	3.65E-03	2.4	-4.6	5
**(S)R (9,E , 7,s)	10 E Ee	3 a 9-1	nu4	1681.85580	-0.3	2.88E-03	0.5	-4.4	3
(R)R (2,E , 1,s)	3 E Ee	4 s 2 1	nu4	1682.19164	-1.4	3.52E-01	1.0	0.2	2
**(O)Q (5,E , 4,s)	5 E Eo	7 a 2 1	nu4	1682.32981	-1.9	3.08E-03	2.4	3.4	3
**(O)Q (7,E , 4,a)	7 E Ee	10 s 2 1	nu4	1682.69259	-3.4	2.76E-03	2.0	-17.8	3
(R)R (2,E , 1,a)	3 E Eo	4 a 2 1	nu4	1682.92107	-0.5	2.75E-01	0.4	-2.1	2
**(O)Q (8,A-, 3,a)	8 A+ A2o	7 s 1 1	nu4	1683.38923	0.9	3.60E-03	1.7	-9.8	3
**(Q)R (2,E , 1,s)	3 E Ee	5 a 1-1	nu4	1686.86367	0.1	2.95E-03	3.1	3.5	7
**(*)Q (9,E , 4,s)	9 E Eo	14 * * *	**	1687.06203	5.4	9.95E-04	4.3	-13.0	2
**(N)Q (7,E , 5,s)	7 E Ee	7 s 2 0	2nu2	1687.36777	2.6	4.67E-04	4.4	7.3	2
**(S)R (3,A+, 0,s)	4 A+ A2o	3 a 2-1	nu4	1689.84399	0.2	1.32E-02	3.6	-4.5	12
(Q)P (9,A+, 0,s)	8 A+ A2o	9 a 0 0	2nu2	1689.89499	0.9	1.59E-03	2.4	-3.7	5
(Q)P (9,E , 1,s)	8 E Ee	17 a 1 0	2nu2	1689.97485	0.7	7.85E-04	0.9	-5.2	3
**(S)R (4,E , 1,a)	5 E Eo	4 s 3-1	nu4	1690.34994	-0.7	5.24E-03	3.4	-5.5	9
(Q)P (9,A-, 3,s)	8 A- A2e	8 a 3 0	2nu2	1690.66452	0.1	1.67E-03	0.9	-0.8	3
(R)R (2,A+, 0,a)	3 A+ A2e	3 a 1 1	nu4	1691.03827	6.7	7.18E-01	3.1	0.9	3
(Q)P (9,E , 4,s)	8 E Eo	16 a 4 0	2nu2	1691.35218	-0.8	8.22E-04	0.7	-3.3	2
(R)R (3,A-, 3,s)	4 A- A2e	1 s 4 1	nu4	1691.73732	-0.2	1.75E+00	0.7	2.2	3
(Q)P (9,E , 5,s)	8 E Ee	16 a 5 0	2nu2	1692.34508	-1.4	8.01E-04	1.6	-5.3	3
(P)R (2,E , 1,s)	3 E Ee	6 s 0 1	nu4	1692.59708	1.1	1.56E-01	2.5	-4.5	6
(R)R (3,A+, 3,a)	4 A+ A2o	2 a 4 1	nu4	1692.80092	1.6	1.53E+00	0.8	1.8	3
**(S)R (5,E , 2,a)	6 E Ee	5 s 4-1	nu4	1693.04412	-0.7	6.71E-03	3.0	1.1	7
(P)R (2,E , 1,a)	3 E Eo	6 a 0 1	nu4	1693.63612	2.7	1.48E-01	2.0	-4.6	7
(Q)R (4,E , 4,a)	5 E Ee	1 s 4 0	2nu2	1694.57988	-3.8	1.61E-01	2.7	2.7	7
**(S)R (5,E , 2,s)	6 E Eo	5 a 4-1	nu4	1695.37537	0.3	6.45E-03	2.9	-5.0	5
**(S)R (6,A-, 3,a)	7 A- A2o	2 s 5-1	nu4	1695.61272	-1.0	1.27E-02	3.1	-2.4	7
(P)R (2,E , 2,s)	3 E Eo	5 s 1-1	nu4	1696.51367	-0.6	4.26E-02	3.3	-11.7	9
(P)R (2,E , 2,a)	3 E Ee	5 a 1-1	nu4	1697.21486	-0.2	4.04E-02	3.3	-9.9	9
**(O)Q (5,E , 5,a)	5 E Eo	6 s 3 1	nu4	1697.45057	-1.7	1.81E-03	9.4	5.8	2
**(S)R (6,A+, 3,s)	7 A+ A2e	3 a 5-1	nu4	1697.95520	0.6	1.23E-02	3.7	-7.2	8
(R)R (3,E , 2,s)	4 E Eo	4 s 3 1	nu4	1698.03202	-0.6	4.77E-01	1.6	-0.3	4
**(O)Q (9,A-, 3,s)	9 A+ A2e	9 a 1 1	nu4	1698.15930	-8.1	1.69E-03	2.3	-14.1	2
(Q)R (4,A-, 3,a)	5 A- A2o	2 s 3 0	2nu2	1698.44364	-4.0	3.00E-01	0.4	4.0	4
(R)R (3,E , 2,a)	4 E Ee	5 a 3 1	nu4	1699.17614	0.2	3.80E-01	0.4	-1.4	4
**(S)R (8,E , 5,a)	9 E Eo	5 s 7-1	nu4	1700.36804	-1.7	4.17E-03	1.5	1.9	3
**(S)R (7,E , 4,s)	8 E Eo	4 a 6-1	nu4	1700.40727	0.9	5.61E-03	3.9	1.5	4
**(O)Q (7,E , 5,a)	7 E Eo	10 s 3 1	nu4	1701.03292	-0.6	2.71E-03	2.6	-3.7	2
(Q)R (4,E , 2,a)	5 E Ee	4 s 2 0	2nu2	1701.39541	-2.8	1.19E-01	0.5	0.2	3
**(S)R (9,A-, 6,a)	10 A- A2e	2 s 8-1	nu4	1702.55014	-2.4	5.31E-03	3.4	-3.9	9

(I)		(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
**(S)R (8,E , 5,s)	9 E Ee	5 a 7-1	nu4	1702.73370	1.9	4.40E-03	3.4	6.3	3
(Q)R (4,E , 1,a)	5 E Eo	5 s 1 0	2nu2	1703.23392	-1.8	1.02E-01	2.1	0.8	8
(R)R (3,E , 1,s)	4 E Ee	6 s 2 1	nu4	1703.38578	-2.6	2.00E-01	3.0	-3.6	7
(Q)R (4,A+, 0,a)	5 A+ A2e	3 s 0 0	2nu2	1703.85861	-1.4	1.96E-01	0.7	2.3	5
**(O)Q (7,E , 5,s)	7 E Ee	9 a 3 1	nu4	1704.08006	-1.5	2.68E-03	2.7	12.5	3
(R)R (3,E , 1,a)	4 E Eo	5 a 2 1	nu4	1704.19576	-1.4	1.34E-01	1.1	-5.1	6
**(S)R (9,A+, 6,s)	10 A+ A2o	3 a 8-1	nu4	1704.93257	2.1	5.21E-03	3.5	-6.6	7
**(Q)R (3,E , 1,a)	4 E Eo	6 s 1-1	nu4	1706.41811	-1.2	4.80E-03	3.3	-13.2	5
(R)R (4,E , 4,a)	5 E Ee	2 a 5 1	nu4	1708.30601	2.3	7.10E-01	1.1	0.8	3
**(S)R (11,E , 8,s)	12 E Eo	5 a10-1	nu4	1708.94972	1.9	8.97E-04	1.9	-7.0	2
**(Q)R (3,E , 1,s)	4 E Ee	7 a 1-1	nu4	1709.08448	2.3	4.67E-03	2.8	-1.9	8
**(S)R (4,A+, 0,a)	5 A+ A2e	4 s 2-1	nu4	1709.78682	0.3	1.57E-02	1.8	-3.0	10
**(M)Q (9,E , 4,a)	9 E Ee	16 s 0 1	nu4	1711.35888	-2.3	3.29E-04	3.5	-10.4	2
(Q)P (8,E , 2,s)	7 E Eo	15 a 2 0	2nu2	1712.52487	0.6	1.37E-03	0.3	-0.8	3
**(S)R (5,E , 1,a)	6 E Eo	6 s 3-1	nu4	1713.00317	-0.6	5.02E-03	2.7	-2.9	7
(R)R (4,A+, 3,s)	5 A+ A2e	2 s 4 1	nu4	1713.70878	0.1	9.99E-01	0.6	0.2	3
(P)R (3,E , 1,s)	4 E Ee	8 s 0 1	nu4	1714.64040	2.8	1.72E-01	2.7	-5.8	6
**(S)R (5,E , 1,s)	6 E Ee	7 a 3-1	nu4	1715.75169	1.6	5.01E-03	2.8	-5.8	4
**(O)Q (6,A+, 6,a)	6 A- A2e	3 s 4 1	nu4	1715.91430	-1.2	2.63E-03	1.4	-2.9	2
**(S)R (6,E , 2,a)	7 E Ee	6 s 4-1	nu4	1716.12067	-1.0	5.32E-03	3.9	-1.1	6
(P)R (3,E , 1,a)	4 E Eo	7 a 0 1	nu4	1716.36200	5.1	1.54E-01	2.5	-4.6	7
(Q)P (8,A-, 6,s)	7 A- A2o	7 a 6 0	2nu2	1716.78100	-0.6	2.09E-03	2.3	-2.5	4
(Q)R (5,E , 4,a)	6 E Ee	3 s 4 0	2nu2	1717.12634	-3.9	1.55E-01	1.1	0.0	2
**(O)Q (7,A-, 6,a)	7 A+ A2e	4 s 4 1	nu4	1718.02191	-0.8	3.58E-03	1.4	-14.7	5
(P)R (3,E , 2,s)	4 E Eo	6 s 1-1	nu4	1718.27480	-0.7	7.08E-02	2.1	-10.9	5
**(S)R (6,E , 2,s)	7 E Eo	7 a 4-1	nu4	1718.88935	1.7	5.04E-03	3.2	-7.4	6
(Q)P (8,E , 7,s)	7 E Ee	13 a 7 0	2nu2	1719.02006	1.6	7.13E-04	0.7	1.4	2
**(S)R (7,A+, 3,a)	8 A+ A2o	3 s 5-1	nu4	1719.11227	-1.7	8.78E-03	3.0	-5.6	7
(P)R (3,E , 2,a)	4 E Ee	7 a 1-1	nu4	1719.43694	1.9	6.47E-02	3.4	-9.8	7
(R)R (4,E , 2,s)	5 E Eo	6 s 3 1	nu4	1719.70957	-1.1	2.69E-01	0.7	-1.1	4
**(O)Q (8,A+, 6,a)	8 A- A2e	5 s 4 1	nu4	1720.11690	-1.1	3.35E-03	3.0	-12.7	5
(R)R (4,E , 2,a)	5 E Ee	6 a 3 1	nu4	1721.15077	-1.1	1.84E-01	1.9	-3.0	7
(Q)R (5,A+, 3,a)	6 A+ A2o	2 s 3 0	2nu2	1721.29751	-2.2	2.32E-01	2.7	1.2	7
(P)R (3,A-, 3,s)	4 A- A2e	2 s 2-1	nu4	1721.63497	0.0	4.32E-02	3.7	-14.6	12
(R)R (5,E , 5,s)	6 E Ee	2 s 6 1	nu4	1721.74507	0.0	7.63E-01	1.9	2.0	4
**(S)R (7,A-, 3,s)	8 A- A2e	4 a 5-1	nu4	1721.89313	2.0	8.80E-03	2.6	-5.4	6
**(S)R (8,E , 4,a)	9 E Ee	6 s 6-1	nu4	1721.97336	-2.8	3.78E-03	3.9	8.0	4
**(O)Q (9,A-, 6,a)	9 A+ A2e	6 s 4 1	nu4	1722.14282	1.4	2.78E-03	3.4	5.2	7
**(O)Q (7,A+, 6,s)	7 A- A2o	4 a 4 1	nu4	1722.19160	-1.1	2.76E-03	3.1	-16.8	4
(P)R (3,A+, 3,a)	4 A+ A2o	3 a 2-1	nu4	1722.42361	-0.2	4.08E-02	3.1	-10.7	11
(R)R (5,E , 5,a)	6 E Eo	3 a 6 1	nu4	1723.82701	2.7	5.70E-01	1.6	0.7	4
(R)R (4,E , 1,s)	5 E Ee	7 s 2 1	nu4	1724.57913	-3.8	9.75E-02	2.3	-5.1	8
**(S)R (9,E , 5,a)	10 E Eo	6 s 7-1	nu4	1724.70640	-2.9	2.17E-03	2.4	-7.2	5
**(O)R (3,E , 2,a)	4 E Ee	8 s 0 1	nu4	1724.99192	1.4	1.48E-03	2.3	-1.9	2
(R)R (4,E , 1,a)	5 E Eo	7 a 2 1	nu4	1725.37115	-1.9	5.65E-02	3.0	-3.8	7
(Q)R (5,E , 1,a)	6 E Eo	7 s 1 0	2nu2	1726.38819	0.8	7.01E-02	2.5	-0.7	6
**(S)R (10,A+, 6,a)	11 A+ A2e	3 s 8-1	nu4	1727.30830	-3.0	2.76E-03	3.8	-2.3	7
**(S)R (9,E , 5,s)	10 E Ee	7 a 7-1	nu4	1727.51256	2.5	2.34E-03	3.2	1.0	4
**(N)Q (8,E , 7,s)	8 E Ee	6 s 4 0	2nu2	1727.82691	0.5	4.61E-04	0.2	7.6	2
**(O)R (3,E , 2,s)	4 E Eo	7 a 0 1	nu4	1728.21837	5.3	1.04E-03	4.0	-0.8	2
**(Q)R (4,E , 1,a)	5 E Eo	8 s 1-1	nu4	1728.81283	-1.0	4.91E-03	4.0	-6.0	7
(Q)R (6,A+, 6,a)	7 A+ A2e	1 s 6 0	2nu2	1729.03147	-3.1	4.37E-01	1.2	4.0	4
(R)R (5,E , 4,s)	6 E Eo	4 s 5 1	nu4	1729.23406	0.7	4.47E-01	0.9	0.3	4
**(S)R (10,A-, 6,s)	11 A- A2o	4 a 8-1	nu4	1730.13025	3.1	2.84E-03	2.1	1.0	2
(R)R (5,E , 4,a)	6 E Ee	4 a 5 1	nu4	1731.69362	1.0	3.06E-01	1.9	-0.6	4
**(S)R (11,E , 7,s)	12 E Ee	6 a 9-1	nu4	1732.62042	2.3	7.04E-04	4.6	-10.5	2
**(S)R (5,E , 1,s)	6 E Ee	8 a 3 1	nu4	1732.70001	-1.8	2.37E-04	3.1	13.2	2
(Q)P (7,E , 1,s)	6 E Ee	13 a 1 0	2nu2	1734.41966	0.8	2.36E-03	5.1	12.2	2
(Q)P (7,E , 2,s)	6 E Eo	13 a 2 0	2nu2	1734.79362	0.2	1.97E-03	7.3	-3.2	2
(Q)R (6,E , 5,a)	7 E Eo	4 s 5 0	2nu2	1734.95511	-3.4	1.50E-01	1.0	-2.8	3
(Q)P (7,A-, 3,s)	6 A- A2e	6 a 3 0	2nu2	1735.44984	0.0	4.00E-03	3.4	2.2	8
(R)R (5,A-, 3,s)	6 A- A2e	3 s 4 1	nu4	1735.80875	-0.2	5.18E-01	2.1	0.2	4
**(S)R (5,A+, 0,s)	6 A+ A2o	4 a 2-1	nu4	1735.89392	2.1	1.27E-02	3.6	-5.0	6
(R)R (6,A-, 6,s)	7 A- A2o	1 s 7 1	nu4	1736.50554	-0.3	1.22E+00	1.0	2.0	3
(P)R (4,E , 1,s)	5 E Ee	9 s 0 1	nu4	1737.38080	4.2	1.51E-01	2.5	-2.1	7
(Q)P (7,E , 5,s)	6 E Ee	12 a 5 0	2nu2	1737.83826	0.0	1.36E-03	0.6	-11.0	2
(R)R (5,A+, 3,a)	6 A+ A2o	3 a 4 1	nu4	1738.06710	-0.4	3.30E-01	1.1	-1.0	4
(R)R (4,A+, 0,a)	5 A+ A2e	5 a 1 1	nu4	1738.84443	7.5	3.19E-01	1.2	-2.0	4
**(S)R (6,E , 1,s)	7 E Ee	8 a 3-1	nu4	1739.50106	1.9	3.69E-03	3.3	-9.9	2
**(S)R (7,E , 2,a)	8 E Ee	8 s 4-1	nu4	1739.66546	-1.0	3.52E-03	2.4	-4.3	2
(P)R (4,E , 1,a)	5 E Eo	9 a 0 1	nu4	1740.01132	5.9	1.17E-01	0.8	-6.1	2
(Q)R (6,E , 4,a)	7 E Ee	4 s 4 0	2nu2	1740.30407	-1.7	1.05E-01	1.4	-1.1	4
(P)R (4,E , 2,s)	5 E Eo	8 s 1-1	nu4	1740.59538	-0.6	7.40E-02	2.2	-10.7	5
(R)R (5,E , 2,s)	6 E Eo	8 s 3 1	nu4	1741.41915	-1.7	1.29E-01	2.1	-4.1	7
(P)R (4,E , 2,a)	5 E Ee	8 a 1-1	nu4	1742.43349	3.4	6.61E-02	3.2	-6.2	9
(P)R (4,A+, 3,s)	5 A+ A2e	4 s 2-1	nu4	1743.75009	0.8	6.88E-02	3.9	-12.0	5
(Q)R (6,A-, 3,a)	7 A- A2o	3 s 3 0	2nu2	1744.75288	0.5	1.45E-01	1.7	-0.9	4
(P)R (4,A-, 3,a)	5 A- A2o	4 a 2-1	nu4	1744.95101	1.7	6.14E-02	3.9	-8.8	9
(Q)R (7,E , 7,a)	8 E Eo	1 s 7 0	2nu2	1745.08533	-0.7	2.05E-01	2.2	1.7	7
(R)R (5,E , 1,s)	6 E Ee	9 s 2 1	nu4	1745.70378	-4.3	3.98E-02	3.6	-9.7	8
(P)R (4,E , 4,s)	5 E Eo	4 s 3-1	nu4	1746.60392	0.0	1.15E-02	3.5	-12.3	9
(P)R (4,E , 4,a)	5 E Ee	5 a 3-1	nu4	1747.41081	-0.1	1.03E-02	3.8	-10.7	9
(R)R (6,E , 5,a)	7 E Eo	5 a 6 1	nu4	1748.08628	0.6	2.02E-01	1.7	-4.5	3
(Q)R (6,E , 2,a)	7 E Ee	7 s 2 0	2nu2	1748.10306	2.6	5.22E-02	1.7	-1.0	3
(Q)R (6,E , 1,a)	7 E Eo	9 s 1 0	2nu2	1750.15397	1.9	3.92E-02	3.6	-1.9	10

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(Q)R (6,A+, 0,a)	7 A+ A2e 5 s 0 0	2nu2	1750.89639	4.1	6.99E-02	1.8	-6.5	2
**(S)R (6,E , 1,a)	7 E Eo 10 s 3 1	nu4	1751.50177	-1.0	2.12E-03	0.4	-3.9	2
(R)R (6,E , 4,s)	7 E Eo 6 s 5 1	nu4	1751.74322	0.6	2.02E-01	2.2	-3.7	3
(Q)R (7,A-, 6,a)	8 A- A2e 2 s 6 0	2nu2	1751.93841	-2.1	2.78E-01	2.8	1.2	5
**(S)R (6,E , 1,s)	7 E Ee 9 a 3 1	nu4	1754.46941	-0.9	2.93E-04	4.1	11.0	2
(R)R (7,E , 7,a)	8 E Eo 2 a 8 1	nu4	1754.98094	1.5	2.39E-01	2.5	-1.2	7
(R)R (6,E , 4,a)	7 E Ee 5 a 5 1	nu4	1755.11088	-0.4	1.14E-01	1.7	-2.8	7
**(S)R (11,A+, 6,s)	12 A+ A2o 5 a 8-1	nu4	1755.83377	2.0	1.09E-03	4.4	-11.4	2
**(Q)R (5,E , 1,s)	6 E Ee 10 a 1-1	nu4	1755.90227	3.7	4.42E-03	2.4	12.8	2
(Q)P (6,E , 1,s)	5 E Ee 11 a 1 0	2nu2	1756.50977	0.2	2.79E-03	3.1	2.4	4
(Q)P (6,E , 2,s)	5 E Eo 11 a 2 0	2nu2	1756.93926	-0.5	2.74E-03	2.5	4.8	3
(Q)P (6,A+, 3,s)	5 A+ A2e 6 a 3 0	2nu2	1757.69085	-0.2	4.87E-03	3.7	2.4	10
(R)R (6,A+, 3,s)	7 A+ A2e 4 s 4 1	nu4	1757.92654	-0.6	2.33E-01	1.4	-1.4	6
(Q)R (7,E , 5,a)	8 E Eo 5 s 5 0	2nu2	1758.37054	-1.4	9.08E-02	2.1	0.6	8
(Q)P (6,E , 4,s)	5 E Eo 10 a 4 0	2nu2	1758.81617	0.8	1.96E-03	0.7	-0.3	3
(R)R (5,A+, 0,s)	6 A+ A2o 5 s 1 1	nu4	1759.50664	6.1	2.60E-01	1.2	-4.0	4
(R)R (7,A+, 6,s)	8 A+ A2o 2 s 7 1	nu4	1759.81477	1.3	5.24E-01	1.8	1.5	4
(Q)R (8,E , 8,a)	9 E Ee 2 s 8 0	2nu2	1760.45558	3.2	1.70E-01	1.8	2.1	7
(R)R (6,A-, 3,a)	7 A- A2o 4 a 4 1	nu4	1760.67203	-1.3	1.21E-01	2.1	-2.6	8
(P)R (5,E , 1,s)	6 E Ee 11 s 0 1	nu4	1760.81204	4.2	9.70E-02	2.4	-7.4	8
(R)R (6,E , 2,s)	7 E Eo 10 s 3 1	nu4	1763.09265	0.0	5.39E-02	3.3	-6.0	8
**(S)R (8,E , 2,a)	9 E Ee 10 s 4-1	nu4	1763.67586	-0.7	2.05E-03	2.7	-5.6	4
**(S)R (7,E , 1,s)	8 E Ee 10 a 3-1	nu4	1763.94291	0.7	2.41E-03	3.5	-9.8	6
(Q)R (7,E , 4,a)	8 E Ee 6 s 4 0	2nu2	1764.04450	0.2	5.89E-02	2.9	-0.6	9
(P)R (5,E , 1,a)	6 E Eo 11 a 0 1	nu4	1764.51130	3.9	7.25E-02	2.2	-3.2	9
(R)R (7,A-, 6,a)	8 A- A2e 3 a 7 1	nu4	1764.56396	-0.4	2.48E-01	2.1	-1.9	7
(R)R (6,E , 2,a)	7 E Ee 9 a 3 1	nu4	1764.81549	-1.4	2.59E-02	2.6	-5.9	10
(R)R (8,E , 8,s)	9 E Eo 2 s 9 1	nu4	1765.50445	-1.8	3.07E-01	1.2	2.3	4
(R)R (6,E , 1,s)	7 E Ee 10 s 2 1	nu4	1766.74470	-3.2	1.55E-02	2.1	-6.1	8
(R)R (6,E , 1,a)	7 E Eo 11 a 2 1	nu4	1767.39561	0.8	5.94E-03	3.1	-5.4	9
**(S)R (9,A+, 3,a)	10 A+ A2o 5 s 5-1	nu4	1767.42157	-1.4	2.72E-03	1.5	-7.8	4
(R)R (7,E , 5,s)	8 E Ee 5 s 6 1	nu4	1767.51806	1.1	1.48E-01	2.2	-2.5	7
(P)R (5,A+, 3,a)	6 A+ A2o 4 a 2-1	nu4	1768.30907	2.1	5.88E-02	0.5	-4.9	2
(Q)R (7,A+, 3,a)	8 A+ A2o 4 s 3 0	2nu2	1768.76769	1.9	7.85E-02	2.5	-0.9	9
(P)R (5,E , 4,s)	6 E Eo 6 s 3-1	nu4	1768.98117	0.1	1.60E-02	1.7	-14.2	10
(P)R (5,E , 4,a)	6 E Ee 7 a 3-1	nu4	1770.31148	1.4	1.43E-02	3.4	-9.7	10
(R)R (8,E , 8,a)	9 E Ee 3 a 9 1	nu4	1770.49798	0.2	1.33E-01	1.4	-1.9	8
**(O)R (5,E , 2,a)	6 E Ee 11 s 0 1	nu4	1771.16249	3.0	2.33E-03	5.3	15.6	2
(P)R (5,E , 5,s)	6 E Ee 5 s 4-1	nu4	1771.39226	-0.2	5.76E-03	4.0	-12.8	5
**(S)R (9,A-, 3,s)	10 A- A2e 5 a 5-1	nu4	1771.58645	0.2	2.55E-03	3.2	-10.7	6
(P)R (5,E , 5,a)	6 E Eo 5 a 4-1	nu4	1772.22445	-0.4	5.32E-03	4.0	-5.9	5
(R)R (7,E , 5,a)	8 E Eo 6 a 6 1	nu4	1772.33123	-0.5	6.57E-02	2.9	-4.0	6
(Q)R (7,E , 2,a)	8 E Ee 9 s 2 0	2nu2	1772.34960	3.0	2.84E-02	2.6	3.1	5
(R)R (7,E , 4,s)	8 E Eo 7 s 5 1	nu4	1774.24218	0.3	8.61E-02	3.4	-1.7	8
(Q)R (7,E , 1,a)	8 E Eo 11 s 1 0	2nu2	1774.71223	6.7	2.00E-02	4.0	-5.2	10
(R)R (8,E , 7,s)	9 E Ee 4 s 8 1	nu4	1774.85859	1.2	1.71E-01	2.5	-0.4	7
(R)R (9,A+, 9,a)	10 A+ A2o 1 a10 1	nu4	1775.26764	8.4	2.42E-01	2.1	2.6	7
**(Q)R (6,E , 1,a)	7 E Eo 12 s 1-1	nu4	1775.45999	-1.7	2.74E-03	3.2	-3.0	4
**(S)R (7,E , 1,s)	8 E Ee 11 a 3 1	nu4	1776.12804	1.0	2.65E-04	6.7	2.7	2
**(O)R (5,E , 2,s)	6 E Eo 11 a 0 1	nu4	1776.20418	4.0	1.37E-03	3.3	-3.9	2
**(S)R (12,A+, 6,a)	13 A+ A2e 5 s 8-1	nu4	1777.82756	1.2	4.42E-04	4.1	-6.3	2
(Q)P (5,A+, 0,s)	4 A+ A2o 5 a 0 0	2nu2	1778.24041	-0.5	6.47E-03	2.7	1.5	9
(Q)P (5,E , 1,s)	4 E Ee 9 a 1 0	2nu2	1778.39682	-0.4	3.21E-03	3.7	3.1	6
**(S)R (11,E , 5,s)	12 E Ee 11 a 7-1	nu4	1778.69890	2.4	4.08E-04	9.8	-12.3	2
(Q)P (5,E , 2,s)	4 E Eo 9 a 2 0	2nu2	1778.87630	-0.4	2.91E-03	3.2	2.2	7
(R)R (9,A-, 9,s)	10 A- A2e 1 s10 1	nu4	1779.72920	-2.8	3.91E-01	1.0	3.4	4
(R)R (7,A-, 3,s)	8 A- A2e 5 s 4 1	nu4	1779.96596	-0.8	9.26E-02	1.9	-3.3	8
**(Q)R (6,E , 1,s)	7 E Ee 11 a 1-1	nu4	1780.53494	-0.2	2.11E-03	0.4	-11.3	2
**(O)R (5,A-, 3,s)	6 A- A2e 5 a 1 1	nu4	1781.56247	-6.2	3.90E-03	2.8	-5.8	7
(Q)R (8,E , 5,a)	9 E Eo 7 s 5 0	2nu2	1782.28788	-0.8	4.22E-02	3.5	-3.2	8
(R)R (8,A-, 6,s)	9 A- A2o 3 s 7 1	nu4	1783.13160	1.3	1.95E-01	1.7	-1.8	7
(R)R (7,A+, 3,a)	8 A+ A2o 5 a 4 1	nu4	1783.22311	1.1	3.56E-02	3.6	-2.9	9
(R)R (9,E , 8,a)	10 E Ee 4 a 9 1	nu4	1783.78285	1.6	7.26E-02	1.7	0.6	9
**(S)R (8,E , 1,a)	9 E Eo 11 s 3-1	nu4	1783.93496	0.1	1.61E-03	4.5	4.3	2
(Q)R (9,A+, 9,a)	10 A+ A2o 2 s 9 0	2nu2	1785.82062	-0.7	1.43E-01	1.8	-0.4	7
**(P)R (7,E , 2,s)	8 E Eo 11 s 1 0	2nu2	1786.18773	6.8	1.78E-03	2.5	2.2	3
(R)R (7,E , 2,a)	8 E Ee 11 a 3 1	nu4	1786.46472	0.8	7.37E-03	1.3	-2.2	3
(P)R (6,E , 2,s)	7 E Eo 12 s 1-1	nu4	1787.05034	-1.3	3.74E-02	3.1	-9.4	7
(R)R (7,E , 1,s)	8 E Ee 12 s 2 1	nu4	1787.71346	-0.6	5.14E-03	1.6	-7.2	4
(Q)R (8,E , 4,a)	9 E Ee 8 s 4 0	2nu2	1788.20153	0.1	2.70E-02	3.9	-4.2	10
(R)R (7,E , 1,a)	8 E Eo 12 a 2 1	nu4	1788.31465	3.6	1.47E-03	1.2	4.6	2
**(S)R (8,E , 1,s)	9 E Ee 12 a 3-1	nu4	1789.06472	-1.0	1.65E-03	1.0	9.0	2
(R)R (6,A+, 0,a)	7 A+ A2e 7 a 1 1	nu4	1789.32857	-0.6	7.89E-02	3.2	-2.0	9
(P)R (6,A+, 3,s)	7 A+ A2e 6 s 2-1	nu4	1789.49646	3.9	4.66E-02	3.5	-11.2	8
(R)R (10,E ,10,a)	11 E Ee 1 a11 1	nu4	1789.62879	14.8	7.54E-02	3.6	1.3	9
(R)R (8,A+, 6,a)	9 A+ A2e 3 a 7 1	nu4	1789.65441	-1.4	6.93E-02	2.8	-1.2	9
(R)R (9,E , 8,s)	10 E Eo 3 s 9 1	nu4	1789.72970	1.0	1.04E-01	2.2	-1.0	8
(P)R (6,E , 1,a)	7 E Eo 13 a 0 1	nu4	1789.75076	-0.5	3.63E-02	2.5	-1.5	8
(R)R (8,E , 5,s)	9 E Ee 7 s 6 1	nu4	1790.38437	0.8	5.59E-02	3.3	-2.8	9
(P)R (6,E , 2,a)	7 E Ee 11 a 1-1	nu4	1790.88161	-0.1	2.67E-02	2.7	-9.3	6
(P)R (6,E , 4,s)	7 E Eo 8 s 3-1	nu4	1791.80670	0.5	1.39E-02	2.9	-13.2	11
**(O)R (5,A+, 3,a)	6 A+ A2o 5 s 1 1	nu4	1791.92152	5.8	2.19E-03	0.4	-5.9	2
(R)R (9,E , 7,a)	10 E Eo 4 a 8 1	nu4	1792.01759	-1.3	4.51E-02	2.9	0.6	7
**(S)R (10,A-, 3,a)	11 A- A2o 6 s 5-1	nu4	1792.18570	-0.6	1.34E-03	2.0	-1.1	2
(Q)R (8,A-, 3,a)	9 A- A2o 5 s 3 0	2nu2	1793.17283	0.9	3.53E-02	4.0	-4.1	9
(R)R (10,E ,10,s)	11 E Eo 2 s11 1	nu4	1793.76199	-3.5	1.14E-01	2.0	2.2	8
(P)R (6,E , 4,a)	7 E Ee 8 a 3-1	nu4	1793.84057	1.6	1.20E-02	3.7	-6.2	12
(P)R (6,E , 5,s)	7 E Ee 6 s 4-1	nu4	1794.03032	-0.2	7.56E-03	2.6	-10.5	6
(P)R (6,E , 5,a)	7 E Eo 7 a 4-1	nu4	1795.40974	1.4	6.47E-03	2.0	-8.4	8
(P)R (6,A-, 6,s)	7 A- A2o 2 s 5-1	nu4	1796.01695	0.1	5.88E-03	1.2	-5.8	3
(R)R (8,E , 4,s)	9 E Eo 9 s 5 1	nu4	1796.63850	0.5	3.14E-02	2.6	-3.2	6
(P)R (6,A+, 6,a)	7 A+ A2e 3 a 5-1	nu4	1796.86348	0.5	5.18E-03	2.6	-2.2	3
(Q)R (8,E , 2,a)	9 E Ee 11 s 2 0	2nu2	1797.05615	-0.3	1.19E-02	2.1	-4.2	9
(Q)R (9,E , 8,a)	10 E Ee 5 s 8 0	2nu2	1797.32946	-3.3	3.33E-02	3.5	-4.4	7
**(*)R (8,E , 1,s)	9 E Ee 13 * * *	**	1797.79985	2.4	2.18E-04	7.7	1.8	2
(R)R (9,E , 7,s)	10 E Ee 6 s 8 1	nu4	1798.57945	1.3	5.90E-02	3.1	-1.3	5
(R)R (10,A-, 9,a)	11 A- A2o 2 a10 1	nu4	1798.90457	3.8	8.94E-02	1.4	2.3	4
(Q)P (4,E , 1,s)	3 E Ee 7 a 1 0	2nu2	1800.00238	-0.7	3.14E-03	3.2	4.1	7
(Q)R (8,A+, 0,a)	9 A+ A2e 7 s 0 0	2nu2	1800.50735	1.6	1.40E-02	3.4	1.0	7
**(O)R (6,A-, 3,a)	7 A- A2o 6 s 1 1	nu4	1800.72441	-5.4	6.49E-03	3.9	2.0	9
(Q)R (10,E ,10,a)	11 E Ee 2 s10 0	2nu2	1800.84591	-1.1	3.57E-02	2.3	-3.0	3
(Q)P (4,A+, 3,s)	3 A+ A2e 4 a 3 0	2nu2	1801.43201	1.2	3.49E-03	0.2	8.9	2
(R)R (8,A+, 3,s)	9 A+ A2e 6 s 4 1	nu4	1801.85707	1.2	3.21E-02	3.6	-5.5	8
**(*)R (8,E , 4,a)	9 E Ee 9 * * *	**	1801.97029	0.8	8.57E-03	3.2	-2.1	9
(R)R (11,E ,11,a)	12 E Eo 2 a12 1	nu4	1803.61044	22.9	4.26E-02	3.8	0.5	8
**(S)R (8,A+, 0,a)	9 A+ A2e 8 s 2-1	nu4	1804.38444	7.4	6.44E-03	2.7	-8.2	8
(R)R (10,A+, 9,s)	11 A+ A2e 2 s10 1	nu4	1804.42200	1.0	1.21E-01	0.5	0.7	4
**(*)R (8,A-, 3,a)	9 A- A2o 6 * * *	**	1805.74411	-0.1	7.55E-03	3.4	-2.8	8
(R)R (8,E , 2,s)	9 E Eo 12 s 3 1	nu4	1805.86795	-0.2	6.73E-03	1.9	-4.9	2
(R)R (9,A+, 6,s)	10 A+ A2o 4 s 7 1	nu4	1806.35799	0.9	6.73E-02	2.4	-1.4	5
(R)R (9,E , 5,a)	10 E Eo 9 a 6 1	nu4	1806.47484	-1.4	1.76E-02	2.3	-1.3	3
(Q)R (9,E , 7,a)	10 E Eo 5 s 7 0	2nu2	1806.92025	-1.9	1.62E-02	3.8	-3.1	8
(R)R (11,E ,11,s)	12 E Ee 2 s12 1	nu4	1807.59593	-3.8	6.13E-02	3.1	0.9	6
(R)R (10,E , 8,a)	11 E Ee 5 a 9 1	nu4	1807.90925	-2.0	2.62E-02	2.6	-0.6	8
**(*)R (8,E , 2,a)	9 E Ee 13 * * *	**	1808.12143	2.5	1.18E-03	4.3	-9.1	2
**(S)R (9,E , 1,a)	10 E Eo 13 s 3-1	nu4	1808.49915	1.5	7.45E-04	3.7	-6.2	2
(R)R (8,E , 1,s)	9 E Ee 14 s 2 1	nu4	1808.63936	3.1	1.69E-03	2.3	3.4	2
(R)R (7,A+, 0,s)	8 A+ A2o 7 s 1 1	nu4	1808.83293	1.0	5.63E-02	2.1	-6.4	5
(P)R (7,E , 1,s)	8 E Ee 14 s 0 1	nu4	1809.49232	0.3	2.49E-02	3.6	-8.6	9
(P)R (7,E , 2,s)	8 E Eo 13 s 1-1	nu4	1811.17766	-2.2	1.96E-02	2.7	-6.9	4
(R)R (9,E , 4,a)	10 E Ee 10 a 5 1	nu4	1812.49885	-1.5	1.11E-02	3.5	-1.8	8
(P)R (7,A-, 3,s)	8 A- A2e 6 s 2-1	nu4	1812.68400	2.9	2.36E-02	3.6	-9.5	7
(R)R (9,E , 5,s)	10 E Ee 9 s 6 1	nu4	1813.11413	0.9	1.90E-02	3.3	-1.9	8
(Q)R (10,A-, 9,a)	11 A- A2o 3 s 9 0	2nu2	1813.34918	-4.4	3.31E-02	3.3	-3.6	8
(R)R (11,E ,10,a)	12 E Ee 3 a11 1	nu4	1813.61863	5.8	2.47E-02	3.0	2.8	8
(R)R (10,E , 8,s)	11 E Eo 5 s 9 1	nu4	1813.85619	1.0	3.26E-02	2.9	-1.9	7
(Q)R (9,A-, 6,a)	10 A- A2e 4 s 6 0	2nu2	1814.81843	-0.1	1.54E-02	2.7	-1.7	7
(P)R (7,E , 4,s)	8 E Eo 9 s 3-1	nu4	1815.08809	0.8	9.01E-03	3.6	-9.8	8
(Q)R (11,E ,11,a)	12 E Eo 3 s11 0	2nu2	1815.50989	-1.4	1.81E-02	3.2	-2.0	8
(P)R (7,E , 1,a)	8 E Eo 15 a 0 1	nu4	1815.62595	-5.1	1.51E-02	3.9	0.3	8
(P)R (7,E , 2,a)	8 E Ee 13 a 1-1	nu4	1816.25354	-3.9	1.34E-02	3.1	0.3	5
(R)R (10,E , 7,a)	11 E Eo 6 a 8 1	nu4	1816.27204	-3.5	1.63E-02	3.9	1.5	6
(P)R (7,A+, 3,a)	8 A+ A2o 6 a 2-1	nu4	1817.12339	-2.1	2.12E-02	2.3	0.6	7
(R)R (12,A+,12,a)	13 A+ A2e 1 a13 1	nu4	1817.25258	32.5	4.50E-02	3.8	1.9	8
(R)R (9,A+, 3,a)	10 A+ A2o 6 a 4 1	nu4	1817.65297	-3.7	1.48E-02	2.5	2.2	6
(P)R (7,E , 4,a)	8 E Ee 10 a 3-1	nu4	1818.02506	0.4	7.28E-03	2.9	-2.8	7
(R)R (9,E , 4,s)	10 E Eo 11 s 5 1	nu4	1818.85993	1.5	1.04E-02	2.9	-2.7	4
(P)R (7,A+, 6,s)	8 A+ A2o 3 s 5-1	nu4	1818.87765	-1.1	6.29E-03	2.4	-13.6	5
(R)R (11,E ,10,s)	12 E Eo 4 s11 1	nu4	1818.92900	1.1	3.18E-02	3.2	-0.2	8
(P)R (7,E , 5,a)	8 E Eo 8 a 4-1	nu4	1819.17369	1.8	5.02E-03	3.5	-1.4	6
(P)R (7,A-, 6,a)	8 A- A2e 4 a 5-1	nu4	1820.29169	1.4	5.49E-03	3.4	-7.1	6
(R)R (12,A-,12,s)	13 A- A2o 1 s13 1	nu4	1821.22481	-3.0	6.34E-02	4.0	1.9	6
(Q)P (3,E , 1,s)	2 E Ee 5 a 1 0	2nu2	1821.25658	-0.5	2.55E-03	2.9	7.2	3
(Q)P (3,E , 2,s)	2 E Eo 5 a 2 0	2nu2	1821.81458	0.9	1.48E-03	7.2	-4.5	2
(R)R (10,E , 7,s)	11 E Ee 7 s 8 1	nu4	1822.16171	0.6	1.84E-02	3.0	-1.1	9
**(O)R (7,A-, 3,s)	8 A- A2e 7 a 1 1	nu4	1822.61541	-6.3	5.02E-03	3.7	-9.2	7
(R)R (11,A+, 9,a)	12 A+ A2o 2 a10 1	nu4	1823.35251	-3.3	2.88E-02	2.8	2.7	7
(R)R (9,A-, 3,s)	10 A- A2e 7 s 4 1	nu4	1823.55685	0.6	1.08E-02	3.2	0.0	8
**(S)R (11,A-, 3,s)	12 A- A2e 7 a 5-1	nu4	1823.66816	1.0	5.05E-04	2.4	-0.2	2
(R)R (10,A+, 6,a)	11 A+ A2e 4 a 7 1	nu4	1823.85522	-2.4	2.02E-02	2.0	1.8	8
(Q)R (10,E , 8,a)	11 E Ee 6 s 8 0	2nu2	1823.95977	-1.0	7.52E-03	3.5	-1.8	8
**(Q)R (8,E , 1,a)	9 E Eo 16 s 1-1	nu4	1824.49078	-2.8	9.60E-04	2.0	-3.0	2
(Q)R (9,E , 1,a)	10 E Eo 15 s 1 0	2nu2	1825.02176	-7.9	3.36E-03	3.8	2.1	3
(R)R (9,E , 2,s)	10 E Eo 14 s 3 1	nu4	1827.07298	2.3	2.09E-03	3.6	0.4	4
(R)R (12,E ,11,a)	13 E Eo 4 a12 1	nu4	1827.97536	7.6	1.26E-02	2.0	4.5	8
(R)R (11,A-, 9,s)	12 A- A2e 3 s10 1	nu4	1828.95649	0.9	3.23E-02	3.0	-5.7	2
(Q)R (11,E ,10,a)	12 E Ee 4 s10 0	2nu2	1829.00031	-4.6	7.91E-03	0.8	-4.0	2
(R)R (10,A-, 6,s)	11 A- A2o 5 s 7 1	nu4	1829.40771	0.7	2.06E-02	3.1	-1.6	7
(Q)R (12,A+,12,a)	13 A+ A2e 2 s12 0	2nu2	1829.78354	-1.0	1.82E-02	3.5	0.4	8
(R)R (13,E ,13,a)	14 E Eo 1 a14 1	nu4	1830.57502	43.5	1.11E-02	2.1	4.3	7
(R)R (10,E , 5,a)	11 E Eo 11 a 6 1	nu4	1830.60690	-0.9	6.28E-03	3.6	2.4	6
(R)R (11,E , 8,a)	12 E Ee 7 a 9 1	nu4	1832.40303	-5.0	8.48E-03	3.8	2.1	8
(Q)R (10,E , 7,a)	11 E Eo 7 s 7 0	2nu2	1832.90748	2.0	3.23E-03	3.1	-0.8	4
(R)R (12,E ,11,s)	13 E Ee 3 s12 1	nu4	1833.24504	2.3	1.56E-02	3.0	-1.3	5
(P)R (8,E , 1,s)	9 E Ee 16 s 0 1	nu4	1834.57825	-2.4	1.02E-02	3.4	-5.4	7
(R)R (13,E ,13,s)	14 E Ee 2 s14 1	nu4	1834.64235	-0.3	1.59E-02	2.3	6.1	6
(R)R (10,E , 5,s)	11 E Ee 11 s 6 1	nu4	1835.63605	1.3	5.84E-03	4.0	0.6	9
(P)R (8,E , 2,s)	9 E Eo 16 s 1-1	nu4	1835.84215	-2.7	8.64E-03	4.0	-2.0	9
(R)R (10,E , 4,a)	11 E Ee 12 a 5 1	nu4	1836.51121	-0.4	3.93E-03	3.7	4.2	4
**(S)R (9,A+, 0,s)	10 A+ A2o 8 a 2-1	nu4	1836.89086	0.3	1.39E-03	2.7	-11.2	4

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(P)R (8,A+, 3,s)	9 A+ A2e 8 s 2-1	nu4	1837.45000	7.6	1.20E-02	3.2	-4.3	9
(R)R (11,E , 8,s)	12 E Eo 7 s 9 1	nu4	1837.79212	0.3	9.56E-03	3.9	2.3	9
(R)R (12,E ,10,a)	13 E Ee 4 a11 1	nu4	1838.42077	-5.5	7.04E-03	3.6	3.0	10
(P)R (8,E , 4,s)	9 E Eo 11 s 3-1	nu4	1838.81259	1.7	4.71E-03	0.5	-2.9	2
(Q)R (10,A+, 6,a)	11 A+ A2e 5 s 6 0	2nu2	1840.23097	1.6	2.62E-03	1.0	4.2	2
(P)R (8,E , 5,s)	9 E Ee 10 s 4-1	nu4	1840.52819	0.2	3.45E-03	3.2	-2.8	3
(R)R (11,E , 7,a)	12 E Eo 8 a 8 1	nu4	1840.61475	-2.0	5.02E-03	3.9	1.2	8
(Q)R (11,A+, 9,a)	12 A+ A2o 3 s 9 0	2nu2	1840.64622	6.3	6.73E-03	3.8	-2.0	4
**(S)R (10,E , 1,s)	11 E Ee 16 a 3-1	nu4	1840.77319	-13.0	2.66E-04	3.1	-6.0	2
(R)R (10,E , 4,s)	11 E Eo 13 s 5 1	nu4	1840.85821	2.1	3.09E-03	3.6	-0.1	10
**(O)R (7,A+, 3,a)	8 A+ A2o 7 s 1 1	nu4	1841.00316	1.1	1.87E-03	1.4	6.0	3
(R)R (10,A-, 3,a)	11 A- A2o 7 a 4 1	nu4	1841.56464	1.8	4.63E-03	3.7	2.9	7
(P)R (8,E , 1,a)	9 E Eo 17 a 0 1	nu4	1842.05009	-7.8	5.45E-03	3.3	6.4	6
(P)R (8,E , 2,a)	9 E Ee 15 a 1-1	nu4	1842.27618	-5.3	5.45E-03	2.2	7.7	8
**(O)R (6,E , 5,s)	7 E Ee 9 a 3 1	nu4	1842.72458	-1.2	3.25E-04	3.9	11.0	2
(P)R (8,E , 4,a)	9 E Ee 12 a 3-1	nu4	1842.85243	-1.5	3.33E-03	3.9	1.8	7
(Q)R (13,E ,13,a)	14 E Eo 2 s13 0	2nu2	1843.66022	-0.3	4.35E-03	3.3	1.0	5
(R)R (12,E ,10,s)	13 E Eo 6 s11 1	nu4	1843.87514	1.8	8.08E-03	3.1	-1.4	8
(Q)R (12,E ,11,a)	13 E Eo 5 s11 0	2nu2	1844.23503	-4.1	3.62E-03	3.8	-6.4	2
(P)R (8,A+, 6,a)	9 A+ A2e 4 a 5-1	nu4	1844.25230	1.5	3.39E-03	2.7	-10.6	2
(P)R (8,A-, 3,a)	9 A- A2o 8 a 2-1	nu4	1844.33440	-5.8	8.90E-03	3.3	2.6	3
**(O)R (8,E , 2,a)	9 E Ee 16 s 0 1	nu4	1844.89974	-2.4	4.22E-04	3.0	3.5	2
(P)R (8,E , 7,a)	9 E Eo 6 a 6-1	nu4	1844.96895	1.9	1.03E-03	1.8	-11.2	2
(R)R (10,A+, 3,s)	11 A+ A2e 8 s 4 1	nu4	1845.05283	6.3	2.89E-03	3.3	-1.0	7
(R)R (11,E , 7,s)	12 E Ee 10 s 8 1	nu4	1845.52247	0.1	4.75E-03	3.6	-8.4	6
(R)R (10,E , 2,a)	11 E Ee 15 a 3 1	nu4	1845.72215	-1.7	1.25E-03	1.7	2.8	2
(R)R (13,A+,12,s)	14 A+ A2o 2 s13 1	nu4	1847.36430	5.1	1.46E-02	3.1	0.3	3
(R)R (11,A-, 6,a)	12 A- A2e 5 a 7 1	nu4	1847.93116	2.1	6.00E-03	3.6	1.3	7
(R)R (12,A-, 9,a)	13 A- A2o 3 a10 1	nu4	1848.13080	-6.9	7.68E-03	3.2	-2.1	5
(R)R (11,A+, 6,s)	12 A+ A2o 6 s 7 1	nu4	1852.21150	0.4	5.76E-03	1.8	1.3	4
(R)R (13,E ,11,a)	14 E Eo 5 a12 1	nu4	1853.15320	-9.8	2.98E-03	2.9	-3.2	4
(R)R (12,A+, 9,s)	13 A+ A2e 4 s10 1	nu4	1853.24458	0.1	8.47E-03	3.1	-2.6	7
**(O)R (8,E , 2,s)	9 E Eo 17 a 0 1	nu4	1853.40157	-7.6	4.48E-04	0.4	-1.0	2
(R)R (11,E , 5,a)	12 E Eo 13 a 6 1	nu4	1854.33926	5.0	1.80E-03	3.6	2.7	4
**(S)R (10,A+, 0,a)	11 A+ A2e 10 s 2-1	nu4	1855.10688	-4.1	2.00E-03	3.2	-5.3	3
(R)R (14,E ,13,a)	15 E Eo 3 a14 1	nu4	1855.70240	8.0	2.44E-03	3.3	1.4	5
(R)R (12,E , 8,a)	13 E Ee 9 a 9 1	nu4	1856.92693	-0.5	2.25E-03	3.3	-0.3	4
(R)R (11,E , 5,s)	12 E Ee 13 s 6 1	nu4	1857.90001	0.3	1.55E-03	1.2	0.5	3
(R)R (13,E ,11,s)	14 E Ee 5 s12 1	nu4	1858.60582	3.6	3.48E-03	3.5	-5.4	6
(Q)R (13,A-,12,a)	14 A- A2e 3 s12 0	2nu2	1859.03265	-2.9	3.48E-03	3.4	-0.5	6
**(O)R (9,A-, 3,s)	10 A- A2e 8 a 1 1	nu4	1859.12523	1.6	1.38E-03	3.4	3.0	4
(Q)R (11,E , 7,a)	12 E Eo 9 s 7 0	2nu2	1859.18019	16.0	4.70E-04	4.6	0.9	2
(R)R (9,A+, 0,s)	10 A+ A2o 9 s 1 1	nu4	1859.71605	-1.2	7.28E-03	3.8	1.4	5
(R)R (11,E , 4,a)	12 E Ee 14 a 5 1	nu4	1859.83655	5.5	1.06E-03	1.1	5.9	4
(P)R (9,E , 1,s)	10 E Ee 18 s 0 1	nu4	1860.07253	-8.1	3.71E-03	3.6	1.3	6
(Q)Q (12,A+, 9,s)	12 A- A2e 8 a 9 0	2nu2	1860.13364	0.7	7.44E-05	0.6	4.5	2
(P)R (9,E , 2,s)	10 E Eo 18 s 1-1	nu4	1860.96838	-0.9	3.03E-03	3.8	0.4	6
(R)R (14,E ,13,s)	15 E Ee 4 s14 1	nu4	1861.28123	10.8	3.22E-03	3.8	2.1	5
(R)R (12,E , 8,s)	13 E Eo 9 s 9 1	nu4	1861.45796	-0.2	2.39E-03	2.9	2.1	3
(Q)P (1,A+, 0,s)	0 A+ A2o 1 a 0 0	2nu2	1862.28769	-0.9	1.44E-03	2.1	-0.4	7
**(O)R (8,E , 4,a)	9 E Ee 14 s 2 1	nu4	1862.42716	2.7	5.52E-04	2.1	8.7	5
(R)R (11,E , 4,s)	12 E Eo 15 s 5 1	nu4	1862.60906	-0.1	8.10E-04	2.0	2.3	5
(Q)Q (11,E , 8,s)	11 E Eo 18 a 8 0	2nu2	1862.66463	3.8	7.07E-05	1.0	3.8	2
(P)R (9,E , 4,s)	10 E Eo 13 s 3-1	nu4	1862.92888	1.8	1.79E-03	1.0	-3.2	6
(Q)Q (10,A-, 6,s)	10 A+ A2o 10 a 6 0	2nu2	1863.48519	-0.2	1.40E-04	2.5	-1.7	3
(R)R (13,E ,10,a)	14 E Ee 6 a11 1	nu4	1863.51716	-10.0	1.67E-03	2.8	-2.0	5
**(O)R (7,E , 5,s)	8 E Ee 11 a 3 1	nu4	1863.87378	1.2	3.03E-04	2.1	3.1	4
**(*)R (8,E , 4,s)	9 E Eo 14 * * *	**	1864.13198	5.8	3.91E-04	2.7	0.8	4
(Q)Q (9,A-, 3,s)	9 A+ A2e 10 a 3 0	2nu2	1864.24305	-1.8	6.46E-05	0.2	3.2	2
(P)R (9,E , 5,s)	10 E Ee 12 s 4-1	nu4	1864.37486	0.3	1.43E-03	3.4	-5.1	6
(R)R (11,A+, 3,a)	12 A+ A2o 8 a 4 1	nu4	1864.39891	-0.2	1.10E-03	3.2	5.2	6
(R)R (12,E , 7,a)	13 E Eo 10 a 8 1	nu4	1864.74759	7.9	1.28E-03	2.6	-1.6	6
(Q)Q (9,E , 4,s)	9 E Eo 18 a 4 0	2nu2	1864.96912	-1.3	6.33E-05	3.0	4.1	2
(Q)Q (10,E , 7,s)	10 E Ee 19 a 7 0	2nu2	1865.10953	0.8	1.13E-04	0.3	-2.0	3
(Q)Q (11,A-, 9,s)	11 A+ A2e 7 a 9 0	2nu2	1865.14090	5.1	2.32E-04	1.7	7.1	3
**(*)R (9,A-, 3,s)	10 A- A2e 9 * * *	**	1865.52118	-12.5	4.27E-03	3.7	1.5	0
(P)R (9,A+, 6,s)	10 A+ A2o 5 s 5-1	nu4	1865.69535	-0.8	2.15E-03	2.8	-7.5	7
(Q)Q (9,E , 5,s)	9 E Ee 18 a 5 0	2nu2	1866.00388	-1.1	1.06E-04	1.1	-0.7	2
(Q)R (11,A-, 6,a)	12 A- A2e 6 s 6 0	2nu2	1866.09318	4.3	2.56E-04	0.0	3.8	2
(P)R (9,E , 7,s)	10 E Ee 8 s 6-1	nu4	1866.90459	-1.8	7.26E-04	1.7	-13.9	5
(Q)Q (10,E , 8,s)	10 E Eo 17 a 8 0	2nu2	1867.32163	0.9	1.74E-04	3.6	-5.4	2
(Q)Q (9,A+, 6,s)	9 A- A2o 9 a 6 0	2nu2	1867.43969	-1.1	3.40E-04	3.8	-4.0	3
(P)R (9,E , 4,a)	10 E Ee 14 a 3-1	nu4	1868.23867	-3.6	1.15E-03	1.7	9.7	3
(R)R (12,E , 7,s)	13 E Ee 12 s 8 1	nu4	1868.59495	-1.4	1.19E-03	2.8	-6.2	5
(P)R (9,A-, 6,a)	10 A- A2e 5 a 5-1	nu4	1868.76255	-0.2	1.74E-03	3.8	4.7	6
(P)R (9,E , 2,a)	10 E Ee 17 a 1-1	nu4	1868.84055	4.7	1.82E-03	1.7	11.8	6
(Q)Q (7,E , 2,s)	7 E Eo 15 a 2 0	2nu2	1870.07517	0.5	6.49E-05	1.2	1.2	3
(Q)Q (8,A-, 6,s)	8 A+ A2o 8 a 6 0	2nu2	1871.34262	-1.7	8.23E-04	1.7	0.9	5
(R)R (12,A+, 6,a)	13 A+ A2e 6 a 7 1	nu4	1871.58582	13.4	1.53E-03	2.8	3.2	7
(Q)Q (7,E , 4,s)	7 E Eo 14 a 4 0	2nu2	1871.75659	-0.7	3.00E-04	3.5	0.1	5
(Q)Q (9,E , 8,s)	9 E Eo 15 a 8 0	2nu2	1872.00523	-1.3	4.49E-04	3.8	-1.8	4
(R)R (13,A+, 9,a)	14 A+ A2o 4 a10 1	nu4	1872.88545	1.5	1.90E-03	1.3	-0.1	3
(R)R (14,A-,12,s)	15 A- A2o 3 s13 1	nu4	1873.14347	7.7	3.05E-03	2.4	-0.3	6
(Q)Q (7,E , 5,s)	7 E Ee 14 a 5 0	2nu2	1873.17585	-0.9	5.26E-04	1.5	-0.2	2
(Q)R (14,E ,13,a)	15 E Eo 4 s13 0	2nu2	1873.39269	1.1	7.57E-04	3.9	-1.5	5

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(Q)Q (8,E , 7,s)	8 E Ee 15 a 7 0	2nu2	1873.60895	-1.5	6.67E-04	1.7	0.9	5
(Q)Q (6,A+, 3,s)	6 A- A2e 6 a 3 0	2nu2	1873.75338	0.0	6.37E-04	1.7	2.5	5
(Q)Q (10,E ,10,s)	10 E Eo 8 a10 0	2nu2	1874.24974	-1.3	4.58E-04	1.4	-2.8	4
(R)R (12,A-, 6,s)	13 A- A2o 7 s 7 1	nu4	1874.71938	-2.9	1.38E-03	1.7	1.2	6
(Q)Q (6,E , 4,s)	6 E Eo 12 a 4 0	2nu2	1874.89141	-0.4	6.22E-04	2.7	2.6	5
**(O)R (8,A+, 3,s)	9 A+ A2e 9 a 1 1	nu4	1875.05039	-8.0	9.27E-04	0.9	-5.8	4
(Q)Q (7,A+, 6,s)	7 A- A2o 7 a 6 0	2nu2	1875.10257	-0.6	1.76E-03	2.1	-0.2	5
(Q)Q (5,E , 1,s)	5 E Ee 11 a 1 0	2nu2	1875.16606	0.4	6.01E-05	3.6	1.1	3
**(Q)R (10,E , 1,a)	11 E Eo 20 s 1-1	nu4	1875.39062	5.0	2.09E-04	2.5	-6.3	3
(Q)Q (9,A-, 9,s)	9 A+ A2e 5 a 9 0	2nu2	1875.46650	-1.3	1.45E-03	1.2	-1.1	5
(Q)Q (5,E , 2,s)	5 E Eo 11 a 2 0	2nu2	1875.65042	0.0	2.58E-04	1.5	4.3	4
(Q)Q (6,E , 5,s)	6 E Ee 12 a 5 0	2nu2	1876.48292	0.6	1.18E-03	2.2	9.8	2
(Q)Q (8,E , 8,s)	8 E Eo 14 a 8 0	2nu2	1876.60860	0.4	1.09E-03	3.1	2.3	5
(R)R (13,A-, 9,s)	14 A- A2e 5 s10 1	nu4	1877.21065	-0.2	1.95E-03	2.9	-0.7	6
(Q)Q (7,E , 7,s)	7 E Ee 13 a 7 0	2nu2	1877.66530	1.8	1.43E-03	1.4	0.0	5
(Q)Q (5,E , 4,s)	5 E Eo 10 a 4 0	2nu2	1877.74776	0.9	1.18E-03	1.0	1.8	4
(Q)Q (4,E , 2,s)	4 E Eo 9 a 2 0	2nu2	1877.98479	0.0	4.65E-04	1.8	2.9	4
**(O)R (7,A-, 6,a)	8 A- A2e 5 s 4 1	nu4	1878.36473	-1.2	4.38E-04	2.6	14.2	4
(Q)Q (6,A-, 6,s)	6 A+ A2o 6 a 6 0	2nu2	1878.62927	3.1	3.49E-03	3.1	-2.1	8
(Q)Q (4,A+, 3,s)	4 A- A2e 4 a 3 0	2nu2	1878.89743	0.9	2.19E-03	1.2	0.8	6
(Q)Q (3,E , 1,s)	3 E Ee 7 a 1 0	2nu2	1879.37188	-0.9	2.05E-04	2.3	5.6	4
(Q)Q (5,E , 5,s)	5 E Ee 10 a 5 0	2nu2	1879.49327	3.4	2.04E-03	1.1	-0.1	4
(R)R (12,E , 5,s)	13 E Ee 15 s 6 1	nu4	1879.87807	-5.7	3.71E-04	2.0	3.1	4
(Q)Q (3,E , 2,s)	3 E Eo 7 a 2 0	2nu2	1879.93197	0.1	8.21E-04	1.7	2.1	4
**(*)R (9,E , 2,s)	10 E Eo 19 * * *	**	1880.17295	-3.8	2.12E-04	0.9	-9.4	4
(Q)Q (4,E , 4,s)	4 E Eo 8 a 4 0	2nu2	1880.25209	2.7	2.12E-03	1.2	-0.2	4
(Q)Q (2,E , 1,s)	2 E Ee 5 a 1 0	2nu2	1880.85430	-0.7	3.55E-04	0.8	1.3	3
(Q)Q (3,A-, 3,s)	3 A+ A2e 4 a 3 0	2nu2	1880.90214	1.8	3.82E-03	3.2	-1.4	8
**(O)R (8,E , 5,a)	9 E Eo 12 s 3 1	nu4	1881.57006	-0.5	3.37E-04	2.8	9.0	4
(Q)Q (1,E , 1,s)	1 E Ee 3 a 1 0	2nu2	1881.86602	0.0	7.63E-04	1.7	3.1	4
(R)R (12,E , 4,a)	13 E Ee 16 a 5 1	nu4	1882.36732	7.1	2.38E-04	1.1	8.8	4
**(O)R (7,A+, 6,s)	8 A+ A2o 5 a 4 1	nu4	1882.98833	1.5	2.89E-04	3.6	8.5	5
(R)R (12,E , 4,s)	13 E Eo 17 s 5 1	nu4	1884.10922	-8.8	1.88E-04	3.7	5.5	4
**(M)R (9,E , 4,s)	10 E Eo 16 a 0 1	nu4	1884.91830	0.8	1.84E-04	2.7	-1.9	3
**(*)R (8,E , 5,s)	9 E Ee 13 * * *	**	1884.97314	2.7	2.08E-04	1.7	3.0	5
(R)R (12,A-, 3,a)	13 A- A2o 9 a 4 1	nu4	1886.33730	-1.1	2.26E-04	2.1	9.8	5
(P)R (10,E , 2,s)	11 E Eo 20 s 1-1	nu4	1886.47223	5.2	9.44E-04	0.8	12.4	5
(P)R (10,E , 7,s)	11 E Ee 10 s 6-1	nu4	1890.59621	-0.8	3.18E-04	3.0	-5.0	5
(R)R (13,E , 7,s)	14 E Ee 14 s 8 1	nu4	1891.33164	-6.8	2.83E-04	1.4	2.6	5
(P)R (10,E , 8,s)	11 E Eo 8 s 7-1	nu4	1891.47928	-2.1	2.29E-04	2.9	-10.7	4
**(O)R (9,A+, 3,a)	10 A+ A2o 9 s 1 1	nu4	1891.55827	-1.2	6.60E-04	1.4	0.6	5
(R)R (14,E ,10,s)	15 E Eo 10 s11 1	nu4	1892.77698	1.5	3.84E-04	1.5	0.0	3
(P)R (10,A+, 6,a)	11 A+ A2e 6 a 5-1	nu4	1893.81839	-1.5	6.50E-04	1.9	19.8	5
**(N)R (9,E , 5,s)	10 E Ee 13 s 2 0	2nu2	1898.08377	-4.6	1.38E-04	2.5	16.5	2
**(O)R (8,A+, 6,a)	9 A+ A2e 6 s 4 1	nu4	1899.67388	0.9	4.42E-04	2.2	16.6	5
**(O)R (10,E , 4,s)	11 E Eo 17 a 2 1	nu4	1902.99757	0.4	1.90E-04	1.6	12.0	4
**(*)R (8,A-, 6,s)	9 A- A2o 6 * * *	**	1904.80155	0.3	2.41E-04	2.1	12.0	4
(P)R (11,E , 4,s)	12 E Eo 18 s 3-1	nu4	1911.75777	-3.0	1.14E-04	2.6	20.6	3
**(M)R (9,E , 4,a)	10 E Ee 18 s 0 1	nu4	1913.53002	-8.2	9.30E-05	4.0	7.2	2
(P)R (11,E , 8,s)	12 E Eo 10 s 7-1	nu4	1915.23670	-0.2	9.03E-05	2.1	9.1	3
(P)R (11,A-, 9,s)	12 A- A2e 4 s 8-1	nu4	1915.83654	-1.4	1.30E-04	3.8	-2.2	4
**(M)R (8,E , 5,s)	9 E Ee 15 a 1-1	nu4	1919.12782	-5.1	5.46E-05	1.7	0.3	2
(Q)R (1,A+, 0,s)	2 A+ A2o 3 a 0 0	2nu2	1920.42203	-1.2	6.13E-04	3.0	-1.3	5
(Q)R (1,E , 1,s)	2 E Ee 5 a 1 0	2nu2	1920.62057	-0.2	2.34E-04	3.1	-0.6	3
**(O)R (9,A-, 6,a)	10 A- A2e 7 s 4 1	nu4	1920.73281	0.1	3.18E-04	3.7	17.7	4
(Q)R (2,E , 1,s)	3 E Ee 7 a 1 0	2nu2	1938.97002	-0.6	1.42E-04	2.7	-1.0	5
(Q)R (2,E , 2,s)	3 E Eo 7 a 2 0	2nu2	1939.55826	0.3	8.97E-05	3.8	-1.4	4
(Q)R (3,A+, 0,s)	4 A+ A2o 5 a 0 0	2nu2	1956.64465	-0.2	7.14E-05	1.5	-1.2	3
(Q)R (3,E , 2,s)	4 E Eo 9 a 2 0	2nu2	1957.39133	-0.5	2.61E-05	2.5	0.3	2
(Q)R (3,A-, 3,s)	4 A- A2e 4 a 3 0	2nu2	1958.36668	0.7	2.74E-05	2.6	-5.2	3
(Q)R (5,A+, 0,s)	6 A+ A2o 7 a 0 0	2nu2	1991.04961	1.1	4.80E-05	3.8	-3.6	4
(Q)R (5,E , 4,s)	6 E Eo 12 a 4 0	2nu2	1993.82281	-0.6	2.80E-05	5.1	1.5	4
(Q)R (6,E , 1,s)	7 E Ee 15 a 1 0	2nu2	2007.82592	1.3	5.92E-05	3.2	0.4	3
(Q)R (6,E , 2,s)	7 E Eo 15 a 2 0	2nu2	2008.27253	0.8	6.05E-05	3.0	-1.2	5
(Q)R (6,A+, 3,s)	7 A+ A2e 8 a 3 0	2nu2	2009.04970	0.1	1.25E-04	3.3	-3.0	5
(Q)R (6,E , 4,s)	7 E Eo 14 a 4 0	2nu2	2010.20787	-0.3	6.78E-05	3.0	1.8	4
(Q)R (6,E , 5,s)	7 E Ee 14 a 5 0	2nu2	2011.82013	-0.7	6.93E-05	3.5	7.8	4
(Q)R (6,A-, 6,s)	7 A- A2o 7 a 6 0	2nu2	2013.98669	-0.2	9.77E-05	3.9	2.3	4
(Q)R (7,A+, 0,s)	8 A+ A2o 9 a 0 0	2nu2	2024.00279	1.0	1.35E-04	1.8	-3.0	5
(Q)R (7,E , 1,s)	8 E Ee 17 a 1 0	2nu2	2024.13197	0.8	7.19E-05	3.2	1.7	4
(Q)R (7,E , 2,s)	8 E Eo 17 a 2 0	2nu2	2024.52889	0.4	7.33E-05	2.4	-0.6	4
(Q)R (7,A-, 3,s)	8 A- A2e 8 a 3 0	2nu2	2025.22160	0.3	1.53E-04	2.6	-2.6	5
(Q)R (7,E , 4,s)	8 E Eo 16 a 4 0	2nu2	2026.25758	-0.5	8.06E-05	3.8	-4.3	5
(Q)R (7,E , 5,s)	8 E Ee 16 a 5 0	2nu2	2027.70681	-1.1	8.94E-05	3.4	1.6	5
(Q)R (7,A+, 6,s)	8 A+ A2o 8 a 6 0	2nu2	2029.66434	-1.5	1.69E-04	2.6	-0.4	5
(Q)R (7,E , 7,s)	8 E Ee 15 a 7 0	2nu2	2032.25451	-1.0	6.86E-05	2.3	7.0	3
(Q)R (8,E , 1,s)	9 E Ee 19 a 1 0	2nu2	2040.18913	-0.3	5.98E-05	3.0	-0.1	5
(Q)R (8,E , 2,s)	9 E Eo 19 a 2 0	2nu2	2040.53266	-0.5	6.27E-05	3.9	-0.2	5
(Q)R (8,A+, 3,s)	9 A+ A2e 10 a 3 0	2nu2	2041.13421	-1.6	1.30E-04	0.4	-4.4	2
(Q)R (8,E , 5,s)	9 E Ee 18 a 5 0	2nu2	2043.31303	-0.9	7.87E-05	3.9	-3.4	5
(Q)R (8,A-, 6,s)	9 A- A2o 9 a 6 0	2nu2	2045.04535	-1.0	1.72E-04	2.9	-1.2	4
(Q)R (8,E , 7,s)	9 E Ee 17 a 7 0	2nu2	2047.35357	-1.1	8.57E-05	3.3	-0.2	5
(Q)R (8,E , 8,s)	9 E Eo 15 a 8 0	2nu2	2050.38771	-1.1	6.72E-05	2.7	2.3	3
(Q)R (9,A+, 0,s)	10 A+ A2o 11 a 0 0	2nu2	2055.96850	1.5	7.99E-05	2.4	2.6	5
(Q)R (9,E , 2,s)	10 E Eo 21 a 2 0	2nu2	2056.34873	0.7	4.31E-05	2.6	3.1	4

(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
(Q)R (9,A-, 3,s)	10 A- A2e 10 a 3 0	2nu2	2056.85424	1.5	8.74E-05	3.4	-4.1	4
(Q)R (9,E , 4,s)	10 E Eo 20 a 4 0	2nu2	2057.62150	-0.5	5.42E-05	3.2	6.5	4
(Q)R (9,E , 5,s)	10 E Ee 20 a 5 0	2nu2	2058.71072	-0.6	5.90E-05	3.4	2.8	5
(Q)R (9,A+, 6,s)	10 A+ A2o 10 a 6 0	2nu2	2060.20644	-0.1	1.21E-04	3.4	-7.4	4
(Q)R (9,E , 7,s)	10 E Ee 19 a 7 0	2nu2	2062.21803	0.5	7.04E-05	3.6	-1.5	4
(Q)R (10,A+, 3,s)	11 A+ A2e 12 a 3 0	2nu2	2072.44775	1.0	5.11E-05	4.0	2.6	4
(Q)R (10,E , 4,s)	11 E Eo 22 a 4 0	2nu2	2073.07202	1.8	2.88E-05	6.9	2.3	3
(Q)R (10,A-, 6,s)	11 A- A2o 11 a 6 0	2nu2	2075.22434	-0.1	7.60E-05	2.7	-0.7	4
(Q)R (10,E , 7,s)	11 E Ee 21 a 7 0	2nu2	2076.93188	1.4	4.50E-05	4.3	0.5	4
(Q)R (10,E , 8,s)	11 E Eo 18 a 8 0	2nu2	2079.22468	3.5	5.01E-05	2.6	-1.5	3
(Q)R (10,A+, 9,s)	11 A+ A2e 7 a 9 0	2nu2	2082.26904	5.4	9.93E-05	3.6	-6.7	3
(Q)R (11,A+, 6,s)	12 A+ A2o 12 a 6 0	2nu2	2090.17607	0.1	3.82E-05	3.6	2.9	3
(Q)R (11,A-, 9,s)	12 A- A2e 8 a 9 0	2nu2	2096.09250	0.9	5.92E-05	3.8	-9.4	3

Note :(I) :Assignment; (II) Identification of the upper level; (III): Vibrational band; (IV) : Observed wavenumber in cm^{-1}; (V) (Obs-calc) wavenumber in 10^{-3} cm^{-1}; (VI) S_0 in cm^{-2} atm^{-1} at 296 K; (VII) Experimental uncertainty in %; (VIII): S_0-S_c/S_0 in %; (IX) : number of spectra used for the measurements.

Line-by-line prediction for the $2\nu_2/\nu_4$ system of ammonia $^{14}NH_3$ between 1253 and 2134 cm^{-1}.

(I)					(II)		(III)		(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
*	S P	12	7 a	11	Eo	4	s 9-1	nu4	c1253.84756	0.0	0.173E-04	2613.17796	1359.32885	0.0
*	S P	12	7 s	11	Ee	4	a 9-1	nu4	c1256.09840	0.0	0.170E-04	2614.96760	1358.87122	0.0
	R P	15	13 s	14	Ee	2	s14 1	nu4	c1263.02024	0.0	0.106E-04	3010.78978	1747.76485	0.0
*	S P	13	6 a	12	A2e	4	s 8-1	nu4	1265.21870	-6.0	0.230E-04	2923.64635	1658.42705	1.0
*	S P	11	7 a	10	Eo	2	s 9-1	nu4	1266.72870	-26.3	0.235E-04	2391.29848	1124.56715	0.0
	R P	16	12 s	15	A2o	3	s13 1	nu4	n1267.49246	0.0	0.137E-04	3417.77150	2150.27904	0.0
*	S P	13	6 s	12	A2o	5	a 8-1	nu4	c1268.51493	0.0	0.217E-04	2926.59256	1658.07925	0.0
*	S P	11	7 s	10	Ee	3	a 9-1	nu4	c1268.67642	0.0	0.236E-04	2392.71235	1124.03568	0.0
	Q P	15	13 a	14	Eo	2	s13 0	2nu2	c1272.38091	0.0	0.155E-04	3020.91370	1748.53216	0.0
	Q P	14	13 a	13	Eo	1	s13 0	2nu2	n1277.08856	0.0	0.199E-04	2730.82459	1453.73603	0.0
*	S P	12	6 a	11	A2e	3	s 8-1	nu4	1277.39640	-32.7	0.494E-04	2682.96210	1405.56243	1.0
	R P	15	12 s	14	A2o	2	s13 1	nu4	c1277.97044	0.0	0.354E-04	3116.43000	1838.45573	0.0
*	S P	12	6 s	11	A2o	4	a 8-1	nu4	c1280.08220	0.0	0.478E-04	2685.23360	1405.15377	0.0
*	S P	10	7 a	9	Eo	1	s 9-1	nu4	c1280.34029	0.0	0.182E-04	2188.91078	908.57496	0.0
*	S P	10	7 s	9	Ee	1	a 9-1	nu4	c1282.09599	0.0	0.185E-04	2190.06398	907.96503	0.0
*	S P	13	5 a	12	Eo	10	s 7-1	nu4	c1288.04972	0.0	0.135E-04	2985.00837	1696.95789	0.0
	R P	14	12 s	13	A2o	1	s13 1	nu4	c1288.59486	0.0	0.557E-04	2833.23415	1544.63569	0.0
	Q P	15	12 a	14	A2e	3	s12 0	2nu2	c1289.91873	0.0	0.291E-04	3128.99551	1839.07397	0.0
*	S P	11	6 a	10	A2e	2	s 8-1	nu4	1290.31600	-35.3	0.841E-04	2461.55485	1171.23532	0.0
	R P	15	11 s	14	Ee	5	s12 1	nu4	c1291.20479	0.0	0.201E-04	3212.16852	1920.96705	0.0
*	S P	13	5 s	12	Ee	11	a 7-1	nu4	c1292.13731	0.0	0.123E-04	2988.77752	1696.64181	0.0
*	S P	11	6 s	10	A2o	3	a 8-1	nu4	1292.55720	22.7	0.831E-04	2463.31577	1170.76084	1.0
*	T P	12	3 s	11	A2e	5	s 6 0	2nu2	c1295.47769	0.0	0.125E-04	2795.88014	1500.40405	0.0
	Q P	14	12 a	13	A2e	2	s12 0	2nu2	c1297.45717	0.0	0.785E-04	2842.83918	1545.38132	0.0
	R P	14	11 a	13	Eo	4	a12 1	nu4	c1297.50157	0.0	0.135E-04	2926.26195	1628.76733	0.0
	R P	15	10 a	14	Ee	6	a11 1	nu4	c1298.05720	0.0	0.124E-04	3294.04406	1995.97688	0.0
*	S P	12	5 a	11	Eo	8	s 7-1	nu4	1300.21280	-32.2	0.318E-04	2744.69261	1444.47659	1.0
	R P	14	11 s	13	Ee	3	s12 1	nu4	c1302.52553	0.0	0.479E-04	2930.67984	1628.15646	0.0
	R P	15	10 s	14	Eo	8	s11 1	nu4	c1302.86597	0.0	0.194E-04	3298.42397	1995.55410	0.0
	Q P	13	12 a	12	A2e	1	s12 0	2nu2	1302.99347	-39.8	0.901E-04	2572.95742	1269.95997	1.0
*	S P	12	5 s	11	Ee	9	a 7-1	nu4	1303.49960	25.6	0.300E-04	2747.60228	1444.10524	1.0
*	S P	10	6 a	9	A2e	1	s 8-1	nu4	1303.97310	4.8	0.104E-03	2259.62339	955.65077	1.0
*	S P	10	6 s	9	A2o	2	a 8-1	nu4	1305.90350	-9.2	0.105E-03	2261.01085	955.10643	1.0
*	T P	11	3 s	10	A2e	4	s 6 0	2nu2	c1306.88637	0.0	0.189E-04	2573.82086	1266.93735	0.0
	R P	15	9 a	14	A2o	4	a10 1	nu4	c1308.94621	0.0	0.271E-04	3371.74052	2062.79689	0.0
	R P	14	10 a	13	Ee	4	a11 1	nu4	c1309.59681	0.0	0.255E-04	3013.74785	1704.14728	0.0
*	S P	13	4 a	12	Ee	12	s 6-1	nu4	c1310.27181	0.0	0.153E-04	3038.61908	1728.34758	0.0
	R P	15	9 s	14	A2e	5	s10 1	nu4	c1313.11479	0.0	0.340E-04	3375.55332	2062.43817	0.0
*	S P	11	5 a	10	Eo	6	s 7-1	nu4	1313.13000	-21.1	0.618E-04	2523.64417	1210.51206	1.0
	Q P	14	11 a	13	Eo	5	s11 0	2nu2	c1313.76139	0.0	0.382E-04	2942.53330	1628.76733	0.0
	R P	13	11 s	12	Ee	2	s12 1	nu4	1314.02974	-43.6	0.693E-04	2667.60044	1353.56634	1.0
	R P	14	10 s	13	Eo	6	s11 1	nu4	1314.84530	18.9	0.560E-04	3018.48140	1703.63799	1.0
*	S P	13	4 s	12	Eo	12	a 6-1	nu4	c1315.40809	0.0	0.132E-04	3043.45519	1728.05529	0.0
*	S P	11	5 s	10	Ee	7	a 7-1	nu4	1315.80550	19.6	0.601E-04	2525.88453	1210.08099	1.0
*	S P	9	6 a	8	A2e	1	s 8-1	nu4	1318.34980	38.3	0.729E-04	2077.34830	759.00233	1.0
	R P	15	8 a	14	Ee	11	a 9 1	nu4	n1318.56837	0.0	0.131E-04	3440.68864	2122.12027	0.0
*	U P	10	3 s	9	A2e	3	a 7 1	nu4	c1319.01929	0.0	0.215E-04	2371.12655	1052.10640	0.0
*	S P	9	6 s	8	A2o	1	a 8-1	nu4	1320.08738	-10.4	0.744E-04	2078.47368	758.38526	1.0
*	S P	14	3 a	13	A2o	8	s 5-1	nu4	c1320.57445	0.0	0.111E-04	3343.50878	2022.93218	0.0
	R P	14	9 a	13	A2o	3	a10 1	nu4	c1320.76077	0.0	0.689E-04	3092.50946	1771.74237	0.0
	R P	13	10 a	12	Ee	3	a11 1	nu4	c1321.88924	0.0	0.332E-04	2752.40109	1430.51691	0.0
	R P	15	8 s	14	Eo	11	s 9 1	nu4	c1322.04446	0.0	0.140E-04	3443.86017	2121.81062	0.0
	Q P	13	11 a	12	Eo	3	s11 0	2nu2	1322.21497	-8.4	0.945E-04	2676.50991	1354.29410	1.0
*	S P	12	4 a	11	Ee	10	s 6-1	nu4	1322.38360	-21.3	0.383E-04	2798.56207	1476.17634	0.0
*	T P	12	2 s	11	Eo	12	s 5 0	2nu2	c1323.24589	0.0	0.103E-04	2841.19156	1517.94098	0.0
	R P	14	9 s	13	A2e	4	s10 1	nu4	1325.70145	2.3	0.111E-03	3097.01158	1771.31036	1.0
*	S P	12	4 s	11	Eo	9	a 6-1	nu4	1326.43270	-34.1	0.350E-04	2802.26909	1475.83298	1.0
*	S P	10	5 a	9	Eo	5	s 7-1	nu4	1326.79440	-7.3	0.954E-04	2322.06269	995.26756	1.0
	R P	15	7 a	14	Eo	12	a 8 1	nu4	n1326.96421	0.0	0.116E-04	3501.07234	2174.10813	0.0
	R P	13	10 s	12	Eo	4	s11 1	nu4	1326.97818	26.6	0.123E-03	2756.88609	1429.91057	1.0
	Q P	14	10 a	13	Ee	5	s10 0	2nu2	c1328.00928	0.0	0.262E-04	3032.15793	1704.14728	0.0
	Q P	12	11 a	11	Eo	1	s11 0	2nu2	1328.51179	-6.2	0.964E-04	2426.80659	1098.29418	1.0
*	S P	10	5 s	9	Ee	5	a 7-1	nu4	1329.02560	14.3	0.947E-04	2323.79730	994.77313	1.0
	R P	15	7 s	14	Ee	14	s 8 1	nu4	c1329.75939	0.0	0.108E-04	3503.60181	2173.83620	0.0
	R P	14	8 a	13	Ee	9	a 9 1	nu4	c1330.83048	0.0	0.388E-04	3162.57624	1831.74499	0.0
*	U P	9	3 s	8	A2e	3	a 7 1	nu4	c1331.60835	0.0	0.172E-04	2187.78722	856.17882	0.0
*	S P	13	3 a	12	A2o	7	s 5-1	nu4	1331.98340	2.7	0.333E-04	3084.63133	1752.64820	1.0
	R P	13	9 a	12	A2o	2	a10 1	nu4	1333.00686	-35.7	0.128E-03	2831.86702	1498.85659	1.0
	R P	15	6 a	14	A2e	7	a 7 1	nu4	c1334.20569	0.0	0.190E-04	3553.07739	2218.89848	0.0
	R P	14	8 s	13	Eo	9	s 9 1	nu4	1335.21138	-20.4	0.496E-04	3166.58558	1831.37216	1.0
*	S P	11	4 a	10	Ee	8	s 6-1	nu4	1335.25570	-19.1	0.817E-04	2577.76266	1242.50505	1.0
*	* P	11	2 s	10	Eo	10	* * *	**	c1335.39726	0.0	0.176E-04	2620.00139	1284.60633	0.0
	R P	12	10 a	11	Ee	1	a11 1	nu4	c1335.44063	0.0	0.129E-04	2510.74722	1175.32160	0.0
	R P	15	6 s	14	A2o	8	s 7 1	nu4	n1336.34008	0.0	0.158E-04	3554.99555	2218.65547	0.0
	Q P	13	10 a	12	Ee	4	s10 0	2nu2	1337.27057	-56.3	0.964E-04	2767.79311	1430.51691	1.0
*	S P	13	3 s	12	A2e	7	a 5-1	nu4	1338.17080	-7.5	0.278E-04	3090.60455	1752.43300	1.0
	R P	13	9 s	12	A2e	3	s10 1	nu4	1338.42300	14.5	0.295E-03	2836.76403	1498.34248	1.0
*	S P	11	4 s	10	Eo	7	a 6-1	nu4	1338.53050	18.9	0.775E-04	2580.63514	1242.10653	1.0
	R P	12	10 s	11	Eo	2	s11 1	nu4	1339.33299	-35.1	0.163E-03	2513.94456	1174.60806	1.0
	R P	14	7 a	13	Eo	10	a 8 1	nu4	c1339.75465	0.0	0.388E-04	3224.06858	1884.32138	0.0
	Q P	14	9 a	13	A2o	4	s 9 0	2nu2	c1340.55425	0.0	0.256E-04	3112.31371	1771.74237	0.0
*	S P	9	5 a	8	Eo	3	s 7-1	nu4	1341.19140	-0.6	0.107E-03	2140.12629	798.93483	1.0
*	S P	9	5 s	8	Ee	3	a 7-1	nu4	1343.11540	-7.0	0.108E-03	2141.49061	798.37451	1.0
	R P	13	8 a	12	Ee	7	a 9 1	nu4	c1343.26905	0.0	0.885E-04	2902.78534	1559.51145	0.0
	R P	14	7 s	13	Ee	12	s 8 1	nu4	1343.47340	-1.5	0.413E-04	3227.46757	1883.99402	1.0
*	S P	12	3 a	11	A2o	6	s 5-1	nu4	1343.96980	-11.6	0.888E-04	2844.73618	1500.76522	1.0
	R P	12	9 a	11	A2o	2	a10 1	nu4	c1346.02129	0.0	0.145E-03	2590.38876	1244.37178	0.0
	Q P	12	10 a	11	Ee	2	s10 0	2nu2	1346.65859	-0.8	0.218E-03	2521.98027	1175.32160	1.0
	R P	14	6 a	13	A2e	6	a 7 1	nu4	c1347.53461	0.0	0.707E-04	3277.13487	1929.61381	0.0
*	* P	10	2 s	9	Eo	8	* * *	**	c1348.35964	0.0	0.233E-04	2418.30719	1069.94630	0.0
	R P	13	8 s	12	Eo	7	s 9 1	nu4	1348.49569	2.7	0.150E-03	2907.56331	1559.06789	1.0
*	S P	10	4 a	9	Ee	6	s 6-1	nu4	1348.88910	-18.1	0.144E-03	2376.42640	1027.53549	1.0
*	S P	12	3 s	11	A2e	6	a 5-1	nu4	1349.06590	-6.9	0.773E-04	2849.47064	1500.40405	1.0
*	T P	12	1 s	11	Ee	13	s 4 0	2nu2	c1349.08321	0.0	0.155E-04	2877.52928	1528.43337	0.0
	Q P	13	9 a	12	A2o	3	s 9 0	2nu2	1350.30032	57.7	0.140E-03	2849.15114	1498.85659	1.0
	R P	14	6 s	13	A2o	7	s 7 1	nu4	1350.55050	-41.6	0.643E-04	3279.87606	1929.32140	1.0
	R P	12	9 s	11	A2e	2	s10 1	nu4	1351.33500	6.2	0.597E-03	2595.10152	1243.76714	1.0
*	S P	10	4 s	9	Eo	6	a 6-1	nu4	1351.55910	15.3	0.141E-03	2378.63605	1027.07848	1.0
	R P	13	7 a	12	Eo	8	a 8 1	nu4	1352.52789	-32.4	0.103E-03	2965.18390	1612.65277	1.0
*	S P	13	2 a	12	Ee	16	s 4-1	nu4	c1353.12392	0.0	0.179E-04	3123.13837	1770.01299	0.0
	Q P	11	10 a	10	Ee	1	s10 0	2nu2	1353.60313	10.0	0.196E-03	2292.39035	938.78822	1.0
	R P	14	5 a	13	Eo	15	a 6 1	nu4	n1354.17543	0.0	0.295E-04	3321.91790	1967.74247	0.0
	R P	12	8 a	11	Ee	5	a 9 1	nu4	c1356.16705	0.0	0.145E-03	2661.81799	1305.64882	0.0
*	S P	8	5 a	7	Eo	2	s 7-1	nu4	1356.30430	32.8	0.680E-04	1977.99395	621.69293	1.0
	R P	14	5 s	13	Ee	15	s 6 1	nu4	c1356.50902	0.0	0.232E-04	3323.98900	1967.47665	0.0
*	S P	11	3 a	10	A2o	5	s 5-1	nu4	1356.79240	0.0	0.201E-03	2624.08137	1267.28897	1.0

	R P	13	7 s	12	Ee	10	s 8 1	nu4	1357.29522	5.4	0.137E-03	2969.55808	1612.26340	1.0
*	S P	8	5 s	7	Ee	1	a 7-1	nu4	1358.02650	-49.6	0.698E-04	1979.09701	621.06555	1.0
	R P	14	4 a	13	Ee	16	a 5 1	nu4	c1359.73710	0.0	0.221E-04	3358.53654	1998.80673	0.0
	R P	11	9 a	10	A2o	1	a10 1	nu4	c1360.25914	0.0	0.393E-04	2368.76230	1008.51126	0.0
	Q P	12	9 a	11	A2o	3	s 9 0	2nu2	1360.46523	-44.9	0.471E-03	2604.84150	1244.37178	1.0
	R P	13	6 a	12	A2e	5	a 7 1	nu4	1360.73889	15.7	0.214E-03	3019.16437	1658.42705	1.0
*	S P	13	2 s	12	Eo	16	a 4-1	nu4	c1360.76185	0.0	0.139E-04	3130.50935	1769.74967	0.0
*	S P	11	3 s	10	A2e	5	a 5-1	nu4	1360.82760	-1.2	0.185E-03	2627.76507	1266.93735	1.0
	R P	14	4 s	13	Eo	17	s 5 1	nu4	n1361.39008	0.0	0.149E-04	3359.95098	1998.56090	0.0
*	T P	13	0 s	12	A2o	9	s 3 0	2nu2	c1361.54862	0.0	0.316E-04	3145.19056	1783.59992	0.0
	Q P	13	8 a	12	Ee	8	s 8 0	2nu2	1361.55170	94.4	0.368E-04	2921.05371	1559.51145	1.0
*	U P	9	2 s	8	Eo	6	a 6 1	nu4	c1361.88738	0.0	0.232E-04	2236.03878	874.15029	0.0
*	* P	11	1 s	10	Ee	11	* * *	**	c1361.93344	0.0	0.294E-04	2657.12980	1295.19577	0.0
	R P	12	8 s	11	Eo	5	s 9 1	nu4	c1361.94018	0.0	0.369E-03	2667.06641	1305.12737	0.0
*	S P	9	4 a	8	Ee	4	a 6-1	nu4	c1363.27339	0.0	0.201E-03	2194.73251	831.45801	0.0
	R P	14	3 a	13	A2o	9	a 4 1	nu4	c1364.17057	0.0	0.286E-04	3387.10358	2022.93218	0.0
	R P	11	9 s	10	A2e	1	s10 1	nu4	1364.50674	-33.5	0.730E-03	2372.31851	1007.80842	1.0
	R P	13	6 s	12	A2o	6	s 7 1	nu4	1364.89364	9.8	0.230E-03	3022.97191	1658.07925	1.0
*	U P	12	0 a	11	A2e	8	s 4 1	nu4	1364.93335	69.2	0.281E-04	2897.15290	1532.22647	1.0
*	S P	12	2 a	11	Ee	14	s 4-1	nu4	1365.10106	29.9	0.492E-04	2883.34833	1518.25026	1.0
	R P	14	3 s	13	A2e	10	s 4 1	nu4	n1365.26320	0.0	0.145E-04	3387.87345	2022.61025	0.0
*	S P	9	4 s	8	Eo	4	a 6-1	nu4	1365.50310	18.4	0.201E-03	2196.44145	830.94019	1.0
	R P	12	7 a	11	Eo	6	s 8 1	nu4	c1365.51819	0.0	0.207E-03	2724.85048	1359.32885	0.0
	R P	13	5 a	12	Eo	13	a 6 1	nu4	1367.89296	45.7	0.101E-03	3064.84628	1696.95789	1.0
	Q P	15	4 a	14	Ee	19	s 4 0	2nu2	n1369.41051	0.0	0.127E-04	3656.74329	2287.33278	0.0
*	U P	10	1 a	9	Eo	9	s 5 1	nu4	c1369.48129	0.0	0.134E-04	2450.50862	1081.02772	0.0
*	* P	16	0 a	15	A2e	14	* * *	**	n1369.78824	0.0	0.170E-04	4017.20943	2647.42119	0.0
	R P	11	8 a	10	Ee	4	a 9 1	nu4	c1369.84115	0.0	0.138E-03	2440.21673	1070.37730	0.0
*	S P	10	3 a	9	A2o	4	a 5-1	nu4	1370.33490	-12.9	0.390E-03	2422.88602	1052.54983	1.0
	Q P	11	9 a	10	A2o	2	s 9 0	2nu2	1370.81230	-8.2	0.963E-03	2379.32438	1008.51126	1.0
	Q P	13	7 a	12	Eo	9	s 7 0	2nu2	c1371.09404	0.0	0.110E-04	2983.73131	1612.65277	0.0
	R P	12	7 s	11	Ee	7	s 8 1	nu4	1371.25540	5.0	0.383E-03	2730.12612	1358.87122	1.0
	R P	13	5 s	12	Ee	13	s 6 1	nu4	1371.34030	13.8	0.890E-04	3067.98073	1696.64181	1.0
*	S P	12	2 s	11	Eo	14	a 4-1	nu4	c1371.34909	0.0	0.408E-04	2889.29120	1517.94098	0.0
	P P	16	16 a	15	Eo	1	a15-1	nu4	1371.66921	-38.0	0.136E-02	3112.50914	1740.83613	1.0
	P P	16	16 s	15	Ee	1	s15-1	nu4	1371.79663	39.0	0.135E-02	3113.96118	1742.16845	1.0
	Q P	12	8 a	11	Ee	6	s 8 0	2nu2	1372.21822	-4.4	0.183E-03	2677.86748	1305.64882	1.0
	Q P	15	3 a	14	A2o	11	s 3 0	2nu2	n1373.12777	0.0	0.358E-04	3684.21205	2311.08428	0.0
*	S P	13	1 a	12	Eo	18	s 3-1	nu4	c1373.46802	0.0	0.190E-04	3153.86733	1780.39613	0.0
*	S P	10	3 s	9	A2e	4	s 5-1	nu4	1373.61620	10.2	0.371E-03	2425.72158	1052.10640	1.0
	R P	12	6 a	11	A2e	4	a 7 1	nu4	1373.94240	-35.6	0.499E-03	2779.50839	1405.56243	1.0
	R P	13	4 a	12	Ee	14	a 5 1	nu4	1373.99091	24.2	0.875E-04	3102.33607	1728.34758	1.0
	Q P	14	5 a	13	Eo	16	s 5 0	2nu2	n1374.46175	0.0	0.128E-04	3342.20422	1967.74247	0.0
	P P	16	15 s	15	A2e	1	s14-1	nu4	1374.62837	-4.3	0.158E-02	3231.01311	1856.38431	1.0
	P P	16	15 a	15	A2o	2	a14-1	nu4	1375.23141	-15.1	0.160E-02	3232.63583	1857.40291	1.0
	Q P	15	2 a	14	Ee	23	s 2 0	2nu2	n1375.51158	0.0	0.191E-04	3703.63383	2328.12225	0.0
	R P	11	8 s	10	Eo	3	s 9 1	nu4	1375.60410	6.1	0.689E-03	2445.37497	1069.77148	1.0
*	* P	10	1 s	9	Ee	9	* * *	**	c1375.79381	0.0	0.440E-04	2456.41972	1080.62686	0.0
*	U P	8	2 s	7	Eo	5	a 6 1	nu4	c1375.81859	0.0	0.159E-04	2073.21284	697.39533	0.0
	Q P	15	1 a	14	Eo	25	s 1 0	2nu2	n1376.58475	0.0	0.237E-04	3714.87285	2338.28810	0.0
	R P	13	4 s	12	Eo	15	s 5 1	nu4	1376.66001	-4.1	0.616E-04	3104.71571	1728.05529	1.0
	P P	16	14 s	15	Eo	5	s13-1	nu4	1377.32288	39.8	0.479E-03	3340.21786	1962.89896	1.0
*	S P	11	2 a	10	Ee	12	s 4-1	nu4	1377.78420	3.9	0.118E-03	2662.74905	1284.96524	1.0
	Q P	10	9 a	9	A2o	1	s 9 0	2nu2	1378.24030	9.8	0.754E-03	2169.72726	791.48794	1.0
*	S P	8	4 a	7	Ee	2	s 6-1	nu4	1378.38670	-2.7	0.204E-03	2032.83724	654.45027	1.0
	P P	16	14 a	15	Ee	5	a13-1	nu4	1378.48332	-38.2	0.494E-03	3342.17911	1963.69197	1.0
	Q P	14	4 a	13	Ee	17	s 4 0	2nu2	n1378.87342	0.0	0.257E-04	3377.68015	1998.80673	0.0
	R P	11	7 a	10	Eo	4	s 8 1	nu4	1378.99757	-21.5	0.291E-03	2503.56687	1124.56715	1.0
	R P	13	3 a	12	A2o	8	a 4 1	nu4	1379.04077	9.1	0.129E-03	3131.68806	1752.64820	1.0
	R P	12	6 s	11	Ee	5	s 7 1	nu4	1379.36010	4.8	0.712E-03	2784.51339	1405.15377	1.0
	P P	16	13 s	15	Ee	6	s12-1	nu4	1379.78032	83.5	0.305E-03	3440.52761	2060.75564	1.0
*	S P	8	4 s	7	Eo	3	a 6-1	nu4	1380.30880	-14.2	0.208E-03	2034.18082	653.87060	1.0
	R P	13	3 s	12	A2e	9	s 4 1	nu4	1380.84410	-69.6	0.741E-04	3133.28406	1752.43300	1.0
	Q P	14	3 a	13	A2o	10	s 3 0	2nu2	c1381.34056	0.0	0.705E-04	3404.26861	2022.93218	0.0
	R P	12	5 a	11	Eo	11	a 6 1	nu4	1381.39767	-11.4	0.270E-03	2825.87540	1444.47659	1.0
	P P	16	13 a	15	Eo	6	a12-1	nu4	1381.59254	-75.9	0.320E-03	3442.98424	2061.38411	1.0
	P P	16	12 s	15	A2o	4	s11-1	nu4	1382.02261	114.2	0.407E-03	3532.29023	2150.27904	1.0
	Q P	12	7 a	11	Eo	7	s 7 0	2nu2	1382.15349	19.4	0.107E-03	2741.48040	1359.32885	1.0
*	S P	11	2 s	10	Eo	12	a 4-1	nu4	1382.83010	-22.2	0.104E-03	2667.43865	1284.60633	1.0
	R P	13	2 a	12	Ee	17	a 3 1	nu4	c1382.95946	0.0	0.371E-04	3152.97220	1770.01299	0.0
*	S Q	14	12 a	14	A2e	1	s14-1	nu4	c1383.15564	0.0	0.414E-04	2928.53742	1545.38132	0.0
	Q P	11	8 a	10	Ee	5	s 8 0	2nu2	1383.38742	-34.8	0.558E-03	2453.76820	1070.37730	1.0
*	* P	14	0 a	13	A2e	11	* * *	**	n1383.55559	0.0	0.123E-04	3437.29847	2053.74288	0.0
	R P	13	2 s	12	Eo	17	s 3 1	nu4	c1383.96958	0.0	0.130E-04	3153.72715	1769.74967	0.0
*	R P	13	1 s	12	Ee	19	s 2 0	2nu2	n1384.03372	0.0	0.171E-04	3164.17331	1780.13959	0.0
	P P	16	11 s	15	Ee	10	s10-1	nu4	1384.06563	120.4	0.142E-03	3615.80435	2231.75076	1.0
	Q P	14	2 a	13	Ee	21	s 2 0	2nu2	n1384.37493	0.0	0.457E-04	3424.41828	2040.04335	0.0
	P P	16	12 a	15	A2e	5	a11-1	nu4	1384.60601	-94.2	0.434E-03	3535.40125	2150.78582	1.0
*	S P	9	3 a	8	A2o	3	s 5-1	nu4	1384.67720	-12.3	0.622E-03	2241.33686	856.65843	1.0
	Q P	10	8 a	9	Ee	2	s 8 0	2nu2	c1384.69820	0.0	0.184E-04	2238.60108	853.90676	0.0
*	U P	9	1 a	8	Eo	7	s 5 1	nu4	c1384.90763	0.0	0.149E-04	2270.27698	885.36964	0.0
*	S Q	14	12 s	14	A2o	1	a14-1	nu4	c1385.28958	0.0	0.423E-04	2929.92175	1544.63569	0.0
	Q P	14	1 a	13	Eo	23	s 1 0	2nu2	n1385.35540	0.0	0.669E-04	3435.67554	2050.32014	0.0
	R P	11	7 s	10	Eo	6	s 8 1	nu4	1385.39980	10.1	0.876E-03	2509.43447	1124.03568	1.0
*	S P	12	1 a	11	Eo	15	s 3-1	nu4	1385.66501	-24.6	0.504E-03	2914.40214	1528.73467	1.0
	P P	16	10 s	15	Eo	12	s 9-1	nu4	1385.91539	62.8	0.103E-03	3691.32463	2305.41552	1.0
	R P	12	5 s	11	Ee	11	s 6 1	nu4	1386.30382	12.1	0.300E-03	2830.40785	1444.10524	1.0
*	* P	11	0 s	10	A2o	7	* * *	**	c1386.65867	0.0	0.171E-03	2685.38002	1298.72244	0.0
*	* P	14	0 a	13	A2e	12	* * *	**	n1386.82307	0.0	0.153E-03	3440.56595	2053.74288	0.0
*	* P	14	2 a	13	Ee	22	* * *	**	n1386.90182	0.0	0.111E-04	3426.94517	2040.04335	0.0
*	S P	9	3 s	8	A2e	4	a 5-1	nu4	1387.33660	23.9	0.611E-03	2243.51303	856.17882	1.0
	R P	11	6 a	10	A2o	3	a 7 1	nu4	1387.39370	-13.1	0.860E-03	2558.63033	1171.23532	1.0
	P P	16	11 a	15	Eo	11	a10-1	nu4	n1387.57661	0.0	0.153E-03	3619.74305	2232.16644	0.0
	P P	16	9 a	15	A2e	7	a 8-1	nu4	n1387.57896	0.0	0.156E-03	3759.06493	2371.48597	0.0
	R P	12	4 a	11	Ee	12	a 5 1	nu4	c1387.87017	0.0	0.269E-03	2864.04712	1476.17634	0.0
	P P	15	15 s	14	A2e	1	s14-1	nu4	1387.91682	-4.6	0.680E-02	2928.53742	1540.62014	1.0
	P P	15	15 a	14	A2o	1	a14-1	nu4	1388.05517	5.7	0.676E-02	2929.92175	1541.86715	1.0
	P P	16	8 s	15	Eo	15	s 7-1	nu4	n1389.05102	0.0	0.611E-04	3819.19740	2430.14638	0.0
	Q P	13	4 a	12	Ee	15	s 4 0	2nu2	c1389.47003	0.0	0.309E-04	3117.77546	1728.34758	0.0
	R P	10	8 s	9	Eo	2	s 9 1	nu4	1389.55691	-22.6	0.775E-03	2242.77037	853.21120	1.0
*	U P	9	1 s	8	Ee	7	a 5 1	nu4	1390.27917	2.4	0.511E-04	2275.19451	884.91558	1.0
	P P	16	7 s	15	Ee	18	s 6-1	nu4	n1390.28478	0.0	0.491E-04	3871.84041	2481.55563	0.0
	Q P	12	6 a	11	A2e	5	s 6 0	2nu2	1390.31857	8.6	0.807E-04	2795.88014	1405.56243	1.0
*	T P	8	1 s	7	Ee	3	s 4 0	2nu2	c1390.35008	0.0	0.110E-04	2098.59022	708.23848	0.0
	P P	15	14 s	14	Eo	3	s13-1	nu4	1390.43661	-14.3	0.203E-02	3039.03789	1648.59985	0.0
	P P	16	10 a	15	Eo	12	a 9-1	nu4	1390.52428	-19.2	0.112E-03	3696.28852	2305.76232	1.0
	P P	16	5 s	15	Ee	21	s 4-1	nu4	n1390.92950	0.0	0.274E-04	3954.07205	2563.14255	0.0
	P P	15	14 a	14	Ee	3	a13-1	nu4	1391.03403	-24.0	0.206E-02	3040.60565	1649.56922	1.0

	P P	16	6 s	15	A2o	10	s 5-1	nu4	n1391.14326	0.0	0.796E-04	3916.99282	2525.84956	0.0
*	S P	10	2 a	9	Ee	10	s 4-1	nu4	1391.23540	-3.7	0.244E-03	2461.59358	1070.35781	1.0
*	S Q	15	12 a	15	A2e	1	s14-1	nu4	c1391.93721	0.0	0.298E-04	3231.01311	1839.07397	0.0
	R P	12	4 s	11	Eo	13	s 5 1	nu4	1392.10375	21.3	0.226E-03	2867.93460	1475.83298	1.0
	Q P	13	3 a	12	A2o	9	s 3 0	2nu2	c1392.50034	0.0	0.141E-03	3145.19056	1752.64820	0.0
	P P	15	13 s	14	Ee	4	s12-1	nu4	1392.69694	-1.9	0.128E-02	3140.46198	1747.76485	1.0
*	S P	12	1 s	11	Ee	16	a 3-1	nu4	c1392.96624	0.0	0.308E-04	2921.41309	1528.43337	0.0
	Q P	10	7 a	9	Eo	3	s 7 0	2nu2	1393.26250	-5.3	0.215E-03	2301.83799	908.57496	1.0
	R P	12	3 a	11	A2o	7	a 4 1	nu4	1393.34880	13.2	0.498E-03	2894.11270	1500.76522	1.0
	P P	16	9 a	15	A2o	8	a 8-1	nu4	n1393.50023	0.0	0.170E-03	3765.28051	2371.78028	0.0
	P P	15	13 a	14	Eo	4	a12-1	nu4	1393.83425	-19.1	0.132E-02	3142.36832	1748.53216	1.0
	Q P	11	7 a	10	Eo	5	s 7 0	2nu2	1393.90152	-14.6	0.474E-03	2518.47013	1124.56715	1.0
	R P	11	6 s	10	A2o	4	s 7 1	nu4	1393.98220	6.9	0.186E-02	2564.74235	1170.76084	1.0
	Q P	13	2 a	12	Ee	19	s 2 0	2nu2	n1394.16032	0.0	0.890E-04	3164.17331	1770.01299	0.0
*	S Q	15	12 s	15	A2o	2	a14-1	nu4	c1394.18011	0.0	0.303E-04	3232.63583	1838.45573	0.0
*	S P	7	4 a	6	Ee	1	s 6-1	nu4	1394.20360	27.1	0.118E-03	1890.87703	496.67614	1.0
	P P	16	3 s	15	A2e	13	s 2-1	nu4	n1394.45111	0.0	0.581E-04	4011.44315	2616.99204	0.0
	P P	15	12 s	14	A2o	3	s11-1	nu4	1394.72144	37.4	0.168E-02	3233.17343	1838.45573	1.0
	R P	10	8 a	9	Ee	3	a 9 1	nu4	c1394.74010	0.0	0.102E-02	2248.64641	853.90676	0.0
	R P	11	5 a	10	Eo	9	a 6 1	nu4	1394.89610	-29.3	0.534E-03	2605.41109	1210.51206	1.0
	Q P	13	1 a	12	Eo	21	s 1 0	2nu2	n1394.95800	0.0	0.161E-03	3175.35413	1780.39613	0.0
*	S P	10	2 s	9	Eo	10	a 4-1	nu4	1395.28480	-4.4	0.225E-03	2465.23154	1069.94630	1.0
*	* P	12	1 s	11	Ee	17	* * *	**	n1395.47782	0.0	0.318E-04	2923.91119	1528.43337	0.0
*	S P	7	4 s	6	Eo	1	a 6-1	nu4	1395.92410	-40.1	0.122E-03	1891.96319	496.03508	1.0
	P P	16	1 s	15	Ee	28	s 0 1	nu4	n1396.35686	0.0	0.275E-04	4040.28388	2643.92702	0.0
	P P	15	11 s	14	Ee	8	s10-1	nu4	1396.49178	-267.3	0.580E-03	3317.48556	1920.96705	0.0
	P P	15	12 a	14	A2e	4	a11-1	nu4	1396.49178	-31.5	0.176E-02	3235.56890	1839.07397	1.0
	P P	16	2 s	15	Eo	28	s 1-1	nu4	n1396.51154	0.0	0.302E-04	4030.38380	2633.87226	0.0
	P P	16	8 a	15	Ee	17	a 7-1	nu4	n1396.51481	0.0	0.655E-04	3826.91528	2430.40047	0.0
*	U P	10	0 a	9	A2e	6	s 4 1	nu4	c1396.56349	0.0	0.925E-04	2481.14373	1084.58120	0.0
	R P	12	3 s	11	A2e	8	s 4 1	nu4	1396.75485	60.0	0.277E-03	2897.15290	1500.40405	1.0
	P P	16	4 s	15	Eo	26	s 3-1	nu4	n1397.80819	0.0	0.318E-04	3991.33764	2593.52945	0.0
	R P	12	2 a	11	Ee	15	a 3 1	nu4	c1397.83011	0.0	0.199E-03	2916.08164	1518.25026	0.0
	P P	15	10 s	14	Eo	10	s 9-1	nu4	1398.12038	69.1	0.417E-03	3393.66757	1995.55410	1.0
*	S P	11	1 a	10	Eo	13	s 3-1	nu4	1398.32310	12.1	0.127E-03	2693.86729	1295.54540	1.0
*	* P	13	2 a	12	Ee	20	* * *	**	n1398.43663	0.0	0.250E-04	3168.44962	1770.01299	0.0
*	* P	15	4 s	14	Eo	23	* * *	**	n1398.98717	0.0	0.413E-04	3686.11570	2287.12853	0.0
	P P	15	11 a	14	Eo	9	a10-1	nu4	1399.05271	-16.7	0.617E-03	3320.52831	1921.47393	1.0
	P P	15	9 s	14	A2e	6	s 8-1	nu4	1399.51438	34.4	0.626E-03	3461.94911	2062.43817	1.0
	P P	16	7 a	15	Eo	18	a 6-1	nu4	n1399.53623	0.0	0.509E-04	3881.31502	2481.77879	0.0
*	S P	8	3 a	7	A2o	2	s 5-1	nu4	1399.75340	-11.0	0.788E-03	2079.59121	679.83671	1.0
	R P	10	7 s	9	Ee	4	s 8 1	nu4	1399.78662	2.6	0.151E-02	2307.75139	907.96503	1.0
*	* P	16	5 a	15	Eo	22	* * *	**	n1400.13468	0.0	0.124E-04	3963.45843	2563.32375	0.0
	R P	12	2 s	11	Eo	16	s 3 1	nu4	1400.14537	20.1	0.601E-04	2918.08434	1517.94098	1.0
*	U P	8	1 a	7	Eo	6	s 5 1	nu4	c1400.58063	0.0	0.122E-04	2109.32675	708.74660	0.0
	P P	15	8 s	14	Eo	13	s 7-1	nu4	1400.71220	5.6	0.244E-03	3522.52226	2121.81062	1.0
	R P	12	1 a	11	Eo	17	a 2 1	nu4	1401.34116	1.9	0.115E-03	2930.07564	1528.73467	1.0
	Q P	10	6 a	9	A2e	2	s 6 0	2nu2	1401.37740	-19.5	0.984E-03	2357.03012	955.65077	0.0
	R P	11	5 s	10	Ee	9	s 6 1	nu4	1401.40760	8.3	0.872E-03	2611.48776	1210.08099	1.0
	R P	11	4 a	10	Ee	10	a 5 1	nu4	1401.45150	-18.2	0.599E-03	2643.95837	1242.50505	1.0
	P P	15	10 a	14	Ee	10	a 9-1	nu4	1401.55502	-24.3	0.449E-03	3397.53433	1995.97688	1.0
	P P	15	7 s	14	Ee	16	s 6-1	nu4	1401.69594	-53.9	0.196E-03	3575.53753	2173.83620	1.0
*	S P	8	3 s	7	A2e	3	a 5-1	nu4	1401.98628	10.8	0.793E-03	2081.27306	679.28786	1.0
*	S Q	13	11 a	13	Eo	2	s13-1	nu4	c1402.22260	0.0	0.464E-04	2756.51444	1354.29410	0.0
	P P	16	6 a	15	A2e	11	a 5-1	nu4	n1402.38545	0.0	0.748E-04	3928.43429	2526.04884	0.0
	Q P	9	8 a	8	Ee	1	s 8 0	2nu2	1402.40260	22.9	0.694E-03	2058.83576	656.43545	1.0
	P P	15	6 s	14	A2o	9	s 5-1	nu4	n1402.42256	0.0	0.322E-03	3621.07803	2218.65547	0.0
*	T P	9	0 s	8	A2o	4	s 3 0	2nu2	1402.48965	16.6	0.561E-04	2290.98871	888.50072	1.0
	P P	15	5 s	14	Ee	20	s 4-1	nu4	n1402.57997	0.0	0.128E-03	3658.96694	2256.38697	0.0
	Q P	11	6 a	10	A2e	4	s 6 0	2nu2	1402.59125	57.1	0.631E-03	2573.82086	1171.23532	1.0
*	T P	15	6 a	14	A2e	9	a 9 0	2nu2	n1402.92448	0.0	0.182E-04	3621.82296	2218.89848	0.0
*	* P	12	1 s	11	Ee	18	* * *	**	n1402.99757	0.0	0.110E-04	2931.43094	1528.43337	0.0
	P P	15	9 a	14	A2o	7	a 8-1	nu4	1404.04994	35.1	0.678E-03	3466.84332	2062.79689	1.0
	P P	14	14 s	13	Eo	2	s13-1	nu4	1404.14580	18.9	0.796E-02	2756.51444	1352.37053	1.0
	Q P	12	3 a	11	A2o	8	s 3 0	2nu2	n1404.16246	0.0	0.900E-04	2904.92768	1500.76522	0.0
*	S Q	13	11 s	13	Ee	1	a13-1	nu4	c1404.27254	0.0	0.475E-04	2757.83899	1353.56634	0.0
	P P	14	14 a	13	Ee	1	a13-1	nu4	1404.29575	-7.8	0.791E-02	2757.83899	1353.54246	1.0
*	S P	11	1 s	10	Ee	14	a 3-1	nu4	1404.50096	-35.1	0.106E-03	2699.70024	1295.19577	1.0
	Q P	12	0 a	11	A2e	9	s 0 0	2nu2	1404.69130	-3.8	0.367E-03	2936.91815	1532.22647	1.0
*	U P	8	1 s	7	Ee	5	a 5 1	nu4	c1405.15705	0.0	0.444E-04	2113.39577	708.23848	0.0
*	S P	9	2 a	8	Ee	8	s 4-1	nu4	1405.47170	0.0	0.427E-03	2280.08814	874.61644	1.0
*	P P	13	2 s	12	Eo	21	s 1 0	2nu2	n1405.60446	0.0	0.143E-04	3175.35413	1769.74967	0.0
*	* P	12	2 a	11	Ee	17	* * *	**	n1405.66093	0.0	0.115E-03	2923.91119	1518.25026	0.0
*	T P	7	1 s	6	Ee	3	s 4 0	2nu2	c1405.77560	0.0	0.136E-04	1956.53845	550.75859	0.0
*	Q P	14	1 a	13	Eo	24	s 1-1	nu4	c1405.90106	0.0	0.108E-04	3456.18589	2050.32014	0.0
	P P	15	1 s	14	Eo	26	s 0 1	nu4	n1405.97381	0.0	0.107E-03	3744.08269	2338.10888	0.0
	Q P	12	1 a	11	Eo	19	s 1 0	2nu2	c1405.98968	0.0	0.256E-03	2934.69514	1528.73467	0.0
	R P	10	7 a	9	Eo	4	a 8 1	nu4	1406.12030	-13.8	0.128E-02	2314.69664	908.57496	1.0
	P P	15	2 s	14	Eo	26	a 1-1	nu4	n1406.18138	0.0	0.119E-03	3734.11965	2327.93827	0.0
*	S P	13	0 s	12	A2o	10	a 2-1	nu4	n1406.19351	0.0	0.222E-04	3189.79343	1783.59992	0.0
	P P	14	13 s	13	Ee	2	s12-1	nu4	1406.22035	-11.1	0.492E-02	2859.03109	1452.80963	1.0
	R P	15	0 s	14	A2o	13	s 1 1	nu4	n1406.36846	0.0	0.232E-03	3747.86474	2341.49628	0.0
	P P	15	8 a	14	Ee	15	a 7-1	nu4	n1406.55626	0.0	0.263E-03	3528.67653	2122.12027	0.0
	P P	14	13 a	13	Eo	3	a12-1	nu4	1406.81312	-23.2	0.499E-02	2860.55147	1453.73603	1.0
	R P	11	3 a	10	Eo	6	a 4 1	nu4	1407.02290	-32.1	0.125E-02	2674.31508	1267.28897	1.0
	P P	15	3 a	14	A2e	13	s 2-1	nu4	n1407.16193	0.0	0.258E-03	3718.18705	2311.02512	0.0
*	S P	12	0 a	11	A2e	10	s 2-1	nu4	1407.46106	-46.1	0.642E-03	2939.69214	1532.22647	1.0
	R P	11	4 s	10	Eo	11	s 5 1	nu4	1407.69350	14.0	0.725E-03	2649.79863	1242.10653	1.0
	P P	14	12 s	13	A2o	2	s11-1	nu4	1408.03352	-34.4	0.639E-02	2952.67265	1544.63569	1.0
	Q P	10	5 a	9	Eo	7	s 5 0	2nu2	c1408.71358	0.0	0.753E-03	2403.98157	995.26756	0.0
*	S P	9	2 s	8	Eo	8	a 4-1	nu4	1408.72990	12.7	0.410E-03	2282.87892	874.15029	1.0
	R P	10	6 s	9	A2o	3	s 7 1	nu4	1408.80480	13.1	0.394E-02	2363.90992	955.10643	1.0
*	* P	16	5 s	15	Ee	23	* * *	**	n1408.97763	0.0	0.118E-04	3972.12018	2563.14255	0.0
	P P	15	7 a	14	Eo	16	a 6-1	nu4	n1409.10376	0.0	0.208E-03	3583.21189	2174.10813	0.0
	P P	14	12 a	13	A2e	3	a11-1	nu4	1409.15259	5.8	0.659E-02	2954.53333	1545.38132	1.0
	P P	15	4 s	14	Eo	24	s 3-1	nu4	n1409.33921	0.0	0.989E-04	3696.46774	2287.12853	0.0
*	* P	11	5 a	10	Eo	10	* * *	**	c1409.49153	0.0	0.155E-03	2620.00139	1210.51206	0.0
*	* P	11	1 s	10	Ee	15	* * *	**	c1409.57029	0.0	0.499E-04	2704.76900	1295.19577	0.0
	P P	14	11 s	13	Ee	6	s10-1	nu4	1409.60730	-15.1	0.217E-02	3037.76527	1628.15646	1.0
*	* P	16	4 a	15	Ee	26	* * *	**	n1409.65792	0.0	0.304E-04	4003.35485	2593.69693	0.0
*	S Q	14	11 a	14	Eo	3	s13-1	nu4	n1410.27056	0.0	0.369E-04	3039.03789	1628.76733	0.0
	P P	14	10 s	13	Eo	8	s 9-1	nu4	1410.95190	-1.6	0.155E-02	3114.59005	1703.63799	1.0
*	* P	15	1 s	14	Ee	27	* * *	**	n1411.34111	0.0	0.105E-04	3749.44999	2338.10888	0.0
	P P	14	11 a	13	Eo	7	a10-1	nu4	1411.34396	-2.5	0.228E-02	3040.11154	1628.76733	1.0
	Q P	11	2 a	10	Ee	13	s 2 0	2nu2	1411.49569	-19.9	0.618E-03	2696.46292	1284.96524	1.0
*	S P	10	1 a	9	Eo	11	s 3-1	nu4	1411.65410	3.5	0.280E-03	2492.68147	1081.02772	1.0
	P P	15	6 a	14	A2e	10	a 5-1	nu4	1411.78651	-98.4	0.314E-03	3630.69483	2218.89848	1.0
*	* P	16	5 a	15	Eo	24	* * *	**	n1411.79414	0.0	0.273E-04	3975.11789	2563.32375	0.0

*	* P	16	3 a	15	A2o	14	* * *	**	n1411.87161	0.0	0.591E-04	4029.21127	2617.33966	0.0
	P P	14	9 s	13	A2e	5	s 8-1	nu4	1412.08100	25.7	0.229E-02	3183.38879	1771.31036	1.0
*	* P	15	5 a	14	Eo	20	* * *	**	n1412.41800	0.0	0.105E-03	3669.02583	2256.60783	0.0
*	S Q	14	11 s	14	Ee	3	a13-1	nu4	1412.44832	-8.7	0.374E-04	3040.60565	1628.15646	1.0
	R P	11	3 s	10	A2e	7	s 4 1	nu4	1412.79830	5.7	0.103E-02	2679.73508	1266.93735	1.0
*	* P	14	4 s	13	Eo	20	* * *	**	n1412.92747	0.0	0.295E-03	3411.48837	1998.56090	0.0
	P P	14	8 s	13	Eo	11	s 7-1	nu4	1412.99691	11.9	0.886E-03	3244.36788	1831.37216	1.0
*	* P	12	2 a	11	Ee	18	* * *	**	n1413.18068	0.0	0.280E-04	2931.43094	1518.25026	0.0
	P P	14	10 a	13	Ee	8	a 9-1	nu4	1413.43150	-6.0	0.164E-02	3117.57938	1704.14728	1.0
*	* P	16	2 a	15	Ee	29	* * *	**	n1413.61994	0.0	0.238E-04	4047.64280	2634.02286	0.0
	P P	14	7 s	13	Ee	14	s 6-1	nu4	1413.70530	2.2	0.710E-03	3297.69910	1883.99402	1.0
	P P	14	6 s	13	A2o	8	s 5-1	nu4	1414.18480	-25.8	0.117E-02	3343.50878	1929.32140	1.0
	P P	14	5 s	13	Ee	18	s 4-1	nu4	1414.31933	-126.4	0.487E-03	3381.80862	1967.47665	1.0
*	R P	10	1 s	9	Ee	11	s 2 0	2nu2	c1414.34584	0.0	0.111E-04	2494.97342	1080.62686	0.0
*	* P	16	1 a	15	Eo	29	* * *	**	n1414.46489	0.0	0.241E-04	4058.53852	2644.07363	0.0
	R P	9	7 s	8	Ee	2	s 8 1	nu4	1414.48640	-15.6	0.157E-02	2125.34426	710.85630	1.0
*	* P	11	4 a	10	Ee	11	* * *	**	1414.62418	-5.7	0.417E-04	2657.12980	1242.50505	1.0
*	* P	14	3 s	13	A2e	11	* * *	**	n1414.68822	0.0	0.627E-03	3437.29847	2022.61025	0.0
	R P	16	0 a	15	A2e	15	a 1 1	nu4	n1414.81412	0.0	0.474E-04	4062.23531	2647.42119	0.0
	Q P	11	1 a	10	Eo	15	s 1 0	2nu2	c1414.84617	0.0	0.647E-03	2710.39934	1295.54540	0.0
	Q P	10	4 a	9	Ee	8	s 4 0	2nu2	1415.11610	-1.6	0.953E-03	2442.65175	1027.53549	0.0
*	O P	13	3 s	12	A2e	10	a 1 1	nu4	c1415.44526	0.0	0.131E-03	3167.88839	1752.43300	0.0
	P P	14	9 a	13	A2o	6	a 8-1	nu4	1415.46675	83.6	0.247E-02	3187.20076	1771.74237	0.0
	R P	10	6 a	9	A2e	3	a 7 1	nu4	1415.47470	-10.8	0.240E-02	2371.12655	955.65077	1.0
*	S P	7	3 a	6	A2o	1	s 5-1	nu4	1415.55980	5.4	0.726E-03	1937.78219	522.22293	1.0
*	O P	15	2 a	14	Ee	26	s 0 1	nu4	n1415.96044	0.0	0.124E-04	3744.08269	2328.12225	0.0
	P P	14	1 s	13	Ee	24	s 0 1	nu4	n1416.05622	0.0	0.368E-03	3466.16057	2050.10435	0.0
	Q P	9	6 a	8	A2e	2	s 6 0	2nu2	c1416.15960	0.0	0.491E-03	2175.16330	759.00233	0.0
*	O P	15	4 a	14	Ee	23	s 2 0	2nu2	n1416.30105	0.0	0.170E-04	3703.63383	2287.33278	0.0
	P P	14	2 s	13	Eo	24	s 1-1	nu4	1416.39879	347.5	0.423E-03	3456.18589	2039.92185	1.0
*	Q P	13	1 a	12	Eo	22	s 1-1	nu4	c1416.48013	0.0	0.311E-04	3196.85891	1780.39613	0.0
	R P	11	2 s	10	Eo	14	s 3 1	nu4	1416.61726	26.4	0.245E-03	2701.22095	1284.60633	1.0
	R P	10	5 s	9	Ee	7	s 6 1	nu4	1416.67610	1.0	0.213E-02	2411.44913	994.77313	1.0
*	S P	10	1 s	9	Ee	12	a 3-1	nu4	1416.67640	-9.2	0.254E-03	2497.30418	1080.62686	1.0
*	P P	12	2 s	11	Eo	19	s 1 0	2nu2	c1416.78337	0.0	0.287E-04	2934.69514	1517.94098	0.0
*	U P	9	0 s	8	A2o	5	a 4 1	nu4	1416.94570	14.6	0.375E-03	2305.44496	888.50072	1.0
*	S P	7	3 s	6	A2e	2	a 5-1	nu4	1417.48470	1.8	0.745E-03	1939.10645	521.62193	0.0
	P P	14	8 a	13	Ee	13	a 7-1	nu4	1417.49498	285.4	0.958E-03	3249.21143	1831.74499	1.0
*	* P	14	4 a	13	Ee	20	* * *	**	n1417.92390	0.0	0.282E-04	3416.73063	1998.80673	0.0
*	* P	14	3 s	13	A2e	12	* * *	**	n1417.95570	0.0	0.277E-03	3440.56595	2022.61025	0.0
*	* P	15	4 a	14	Ee	24	* * *	**	n1418.42627	0.0	0.119E-03	3705.75905	2287.33278	0.0
	R P	9	7 a	8	Eo	2	a 8 1	nu4	1418.53920	9.4	0.205E-02	2130.08622	711.54796	1.0
*	S Q	15	11 a	15	Eo	5	s13-1	nu4	c1418.74791	0.0	0.179E-04	3340.21786	1921.47393	0.0
*	* P	15	3 a	14	A2o	12	* * *	**	n1419.18384	0.0	0.241E-03	3730.26812	2311.08428	0.0
	R P	11	1 s	10	Ee	16	s 2 1	nu4	c1419.31192	0.0	0.599E-04	2714.50173	1295.19577	0.0
	P P	14	7 a	13	Eo	14	a 6-1	nu4	1419.52174	174.5	0.764E-03	3303.82567	1884.32138	1.0
*	* P	14	1 s	13	Ee	25	* * *	**	n1419.55024	0.0	0.477E-04	3469.65459	2050.10435	0.0
*	* P	11	2 a	10	Ee	15	* * *	**	c1419.80082	0.0	0.183E-04	2704.76900	1284.96524	0.0
	P P	11	1 a	10	Eo	16	a 0 1	nu4	c1420.31283	0.0	0.687E-04	2715.85766	1295.54540	0.0
*	U P	7	1 s	6	Ee	4	a 5 1	nu4	c1420.34317	0.0	0.261E-04	1971.10083	550.75859	0.0
	P P	13	13 s	12	Ee	1	s12-1	nu4	1420.34890	29.5	0.175E-01	2596.49313	1176.14718	1.0
	Q P	10	3 a	9	A2o	5	s 3 0	2nu2	1420.46050	16.6	0.215E-02	2473.00867	1052.54983	1.0
*	S P	8	2 a	7	Ee	6	s 4-1	nu4	1420.48260	2.0	0.618E-03	2118.39941	697.91701	1.0
	P P	13	13 a	12	Eo	1	a12-1	nu4	1420.51042	-15.7	0.174E-01	2597.76515	1177.25316	1.0
	P P	14	6 a	13	A2e	8	a 5-1	nu4	n1420.92097	0.0	0.108E-02	3350.53478	1929.61381	0.0
*	S Q	12	10 a	12	Ee	1	s12-1	nu4	1421.17540	38.7	0.974E-04	2596.49313	1175.32160	1.0
*	S Q	15	11 s	15	Ee	5	a13-1	nu4	c1421.20824	0.0	0.180E-04	3342.17911	1920.96705	0.0
*	* P	15	2 a	14	Ee	27	* * *	**	n1421.32774	0.0	0.969E-04	3749.44999	2328.12225	0.0
	P P	13	12 s	12	A2o	1	s11-1	nu4	1421.97029	-12.1	0.223E-01	2691.04234	1269.07084	1.0
*	* P	15	1 a	14	Eo	27	* * *	**	n1422.09540	0.0	0.997E-04	3760.38350	2338.28810	0.0
*	T P	6	1 s	5	Ee	1	s 4 0	2nu2	c1422.11903	0.0	0.111E-04	1834.74695	412.62430	0.0
	P P	13	12 a	12	A2e	2	a11-1	nu4	1422.56173	-1.7	0.226E-01	2692.52187	1269.95997	1.0
*	* P	14	4 s	13	Eo	22	* * *	**	n1422.90045	0.0	0.201E-03	3421.46135	1998.56090	0.0
	P P	14	5 a	13	Eo	18	a 4-1	nu4	1422.94793	52.4	0.481E-03	3390.68516	1967.74247	1.0
*	* P	10	5 a	9	Eo	8	* * *	**	1423.04029	6.6	0.910E-03	2418.30719	995.26756	0.0
	Q P	9	5 a	8	Eo	5	s 5 0	2nu2	1423.14250	-16.3	0.654E-03	2222.07896	798.93483	0.0
*	S P	8	2 s	7	Eo	7	a 4-1	nu4	1423.14251	23.5	0.614E-03	2120.53549	697.39533	1.0
*	S Q	12	10 s	12	Eo	1	a12-1	nu4	1423.15490	-21.9	0.998E-04	2597.76515	1174.60806	1.0
	P P	13	11 s	12	Ee	5	s10-1	nu4	1423.32790	-27.0	0.748E-02	2776.89694	1353.56634	1.0
	R P	10	4 s	9	Eo	9	s 5 1	nu4	1423.43040	2.6	0.199E-02	2450.50862	1027.07848	1.0
	R P	9	6 s	8	A2o	2	s 7 1	nu4	1423.88750	11.4	0.628E-02	2182.27162	758.38526	1.0
*	T Q	10	6 s	10	A2o	2	s 9 0	2nu2	c1424.21726	0.0	0.206E-04	2379.32438	955.10643	0.0
*	* P	15	5 a	14	Eo	21	* * *	**	n1424.22908	0.0	0.197E-04	3680.83691	2256.60783	0.0
*	O P	15	5 s	14	Ee	21	a 3 1	nu4	n1424.27104	0.0	0.290E-04	3680.65801	2256.38697	0.0
	P P	13	10 s	12	Eo	6	s 9-1	nu4	1424.42946	-79.2	0.525E-02	2854.34795	1429.91057	0.0
	P P	13	11 a	12	Eo	5	a10-1	nu4	1424.42964	44.5	0.771E-02	2778.71929	1354.29410	0.0
*	T P	14	6 a	13	A2e	9	a 9 0	2nu2	n1424.51875	0.0	0.161E-03	3354.13256	1929.61381	0.0
	Q P	10	2 a	9	Ee	11	s 2 0	2nu2	1424.61520	-4.1	0.113E-02	2494.97342	1070.35781	1.0
*	T P	13	7 a	12	Eo	11	a10 0	2nu2	c1424.73176	0.0	0.209E-04	3037.39059	1612.65277	0.0
	P P	13	9 s	12	A2e	4	s 8-1	nu4	1425.30234	-15.3	0.769E-02	2923.64635	1498.34248	1.0
*	* P	10	1 s	9	Ee	13	* * *	**	1425.41060	14.8	0.788E-04	2506.03598	1080.62686	1.0
*	T P	15	5 a	14	Eo	22	a 8 0	2nu2	n1425.48965	0.0	0.347E-04	3682.09748	2256.60783	0.0
*	O P	14	4 a	13	Ee	21	s 2 0	2nu2	n1425.61155	0.0	0.998E-04	3424.41828	1998.80673	0.0
*	P P	13	4 s	12	Eo	17	s 3 1	nu4	1425.66520	-66.6	0.322E-04	3153.72715	1728.05529	1.0
*	S P	9	1 a	8	Eo	9	s 3-1	nu4	1425.75793	52.2	0.531E-03	2311.12235	885.36964	0.0
*	P P	11	2 s	10	Eo	15	s 1 0	2nu2	c1425.78524	0.0	0.496E-04	2710.39934	1284.60633	0.0
	P P	13	4 s	12	Eo	18	s 3-1	nu4	1425.80859	-34.5	0.124E-02	3153.86733	1728.05529	1.0
	P P	13	8 s	12	Eo	10	s 7-1	nu4	1425.93920	-12.8	0.294E-02	2985.00837	1559.06789	1.0
*	O P	16	6 s	15	A2o	11	a 4 1	nu4	n1425.95070	0.0	0.136E-04	3951.80026	2525.84956	0.0
	Q P	8	7 a	7	Eo	1	s 7 0	2nu2	1426.06500	0.9	0.122E-02	1959.73389	533.66898	1.0
*	O P	16	6 a	15	A2e	12	s 4 1	nu4	n1426.07846	0.0	0.177E-04	3952.12730	2526.04884	0.0
*	O P	14	2 a	13	Ee	24	s 0 1	nu4	n1426.11722	0.0	0.546E-04	3466.16057	2040.04335	0.0
	P P	13	10 a	12	Ee	6	a 9-1	nu4	1426.13820	12.7	0.550E-02	2856.65384	1430.51691	1.0
	P P	13	7 s	12	Ee	12	s 6-1	nu4	1426.35580	1.2	0.234E-02	3038.61908	1612.26340	1.0
	P P	13	5 s	12	Ee	16	s 4-1	nu4	1426.49530	-12.6	0.163E-02	3123.13837	1696.64181	1.0
	P P	13	6 s	12	A2o	7	s 5-1	nu4	1426.55217	0.9	0.386E-02	3084.63133	1658.07925	1.0
*	* P	13	1 s	12	Ee	21	* * *	**	n1426.61810	0.0	0.108E-02	3206.75769	1780.13959	0.0
*	S P	11	0 s	10	A2o	8	a 2-1	nu4	c1426.66897	0.0	0.320E-03	2725.39127	1298.72244	0.0
	R P	13	0 s	12	A2o	11	s 1 1	nu4	1426.80170	61.4	0.266E-02	3210.39548	1783.59992	1.0
	P P	13	2 s	12	Eo	22	s 1-1	nu4	1427.12620	169.6	0.137E-02	3196.85891	1769.74967	0.0
	Q P	10	1 a	9	Eo	13	s 1 0	2nu2	1427.41805	4.7	0.120E-02	2508.44530	1081.02772	1.0
*	Q P	12	1 a	11	Eo	20	s 1-1	nu4	c1427.68377	0.0	0.820E-04	2956.41333	1528.73467	0.0
	P P	13	9 a	12	A2o	5	a 8-1	nu4	1427.73745	14.8	0.818E-02	2926.59256	1498.85659	1.0
*	R P	9	1 s	8	Ee	9	s 2 0	2nu2	1427.85437	16.6	0.288E-04	2312.76829	884.91558	1.0
*	* P	14	4 a	13	Ee	22	* * *	**	n1428.13844	0.0	0.374E-03	3426.94517	1998.80673	0.0
	Q P	10	0 a	9	A2e	7	s 0 0	2nu2	1428.27840	7.1	0.188E-02	2512.85889	1084.58120	1.0
	P P	14	3 a	13	A2o	12	a 2-1	nu4	1428.41413	-111.5	0.897E-03	3451.35746	2022.93218	1.0
*	* P	13	1 s	12	Ee	22	* * *	**	n1428.46433	0.0	0.262E-03	3208.60392	1780.13959	0.0

*	S Q	13	10 a	13	Ee	2	s12-1	nu4	1428.51400	-1.8	0.853E-04	2859.03109	1430.51691	1.0
	R P	9	6 a	8	A2e	3	a 7 1	nu4	1428.78460	-2.9	0.567E-02	2187.78722	759.00233	1.0
	P P	13	3 a	12	A2e	11	a 2-1	nu4	1428.85067	21.6	0.283E-02	3181.28151	1752.43300	1.0
*	* P	10	4 a	9	Ee	9	* * *	**	1428.88595	17.2	0.559E-03	2456.41972	1027.53549	1.0
*	U P	8	0 a	7	A2e	4	s 4 1	nu4	c1428.89155	0.0	0.124E-03	2141.24555	712.35318	0.0
	R P	10	3 s	9	A2e	6	s 4 1	nu4	1429.03880	14.7	0.312E-02	2481.14373	1052.10640	1.0
	P P	13	8 a	12	Ee	11	a 7-1	nu4	1429.26610	0.3	0.316E-02	2988.77752	1559.51145	1.0
	Q P	9	4 a	8	Ee	6	s 4 0	2nu2	1429.26610	37.1	0.104E-02	2260.72040	831.45801	0.0
*	Q P	11	2 a	10	Ee	16	s 2 1	nu4	1429.54272	62.3	0.306E-04	2714.50173	1284.96524	1.0
*	* P	14	2 a	13	Ee	25	* * *	**	n1429.61124	0.0	0.352E-03	3469.65459	2040.04335	0.0
*	S P	9	1 s	8	Eo	10	a 3-1	nu4	1429.78530	1.2	0.502E-03	2314.70076	884.91558	1.0
*	* P	14	1 a	13	Eo	25	* * *	**	n1430.26624	0.0	0.373E-03	3480.58638	2050.32014	0.0
	R P	14	0 a	13	A2e	13	a 1 1	nu4	n1430.55455	0.0	0.732E-03	3484.29743	2053.74288	0.0
*	S Q	13	10 s	13	Eo	3	a12-1	nu4	1430.64130	4.0	0.866E-04	2860.55147	1429.91057	1.0
	P P	13	7 a	12	Eo	12	a 6-1	nu4	1430.80830	58.8	0.251E-02	3043.45519	1612.65277	1.0
*	O P	11	2 s	10	Eo	16	a 0 1	nu4	c1431.25190	0.0	0.209E-04	2715.85766	1284.60633	0.0
	Q P	8	6 a	7	A2e	1	s 6 0	2nu2	c1431.96940	0.0	0.442E-04	2013.44473	581.47075	0.0
*	S P	6	3 a	5	A2o	1	s 5-1	nu4	1432.04660	13.3	0.381E-03	1816.02272	383.97745	1.0
*	T P	7	0 s	6	A2o	2	s 3 0	2nu2	c1432.13133	0.0	0.125E-03	1986.52632	554.39306	0.0
	R P	9	5 s	8	Ee	5	s 6 1	nu4	1432.15650	10.2	0.421E-02	2230.52999	798.37451	1.0
*	S P	10	0 a	9	A2e	8	s 2-1	nu4	1432.15680	77.7	0.186E-02	2516.73023	1084.58120	0.0
	P P	13	6 a	12	A2e	7	a 5-1	nu4	1432.16612	-113.8	0.415E-02	3090.60455	1658.42705	0.0
*	* P	13	4 a	12	Ee	18	* * *	**	n1432.63559	0.0	0.533E-03	3160.98317	1728.34758	0.0
*	* P	10	3 a	9	A2o	6	* * *	**	1433.03110	0.6	0.529E-03	2485.58087	1052.54983	1.0
*	O P	12	3 a	11	A2o	9	s 1 1	nu4	c1433.25002	0.0	0.179E-04	2933.97417	1500.76522	0.0
	R P	10	2 s	9	Eo	12	s 3 1	nu4	1433.31660	-5.6	0.865E-03	2503.26346	1069.94630	1.0
	P P	13	5 a	12	Eo	16	a 4-1	nu4	1433.55330	18.4	0.171E-02	3130.50935	1696.95789	1.0
*	S P	6	3 s	5	A2e	1	a 5-1	nu4	1433.77483	-40.7	0.398E-03	1817.09732	383.31842	1.0
*	T Q	11	6 s	11	A2o	3	s 9 0	2nu2	1434.07702	-36.4	0.277E-04	2604.84150	1170.76084	0.0
	Q P	9	3 a	8	A2o	4	s 3 0	2nu2	1434.33210	18.2	0.266E-02	2290.98871	856.65843	1.0
*	* P	10	2 a	9	Ee	13	* * *	**	c1435.68056	0.0	0.705E-04	2506.03598	1070.35781	0.0
*	O P	13	4 a	12	Ee	19	s 2 0	2nu2	n1435.82573	0.0	0.389E-03	3164.17331	1728.34758	0.0
*	S P	7	2 a	6	Ee	5	s 4-1	nu4	1436.23890	-9.4	0.710E-03	1976.66152	540.42168	1.0
	R P	10	1 s	9	Eo	14	s 2 1	nu4	c1436.25092	0.0	0.254E-03	2516.87476	1080.62686	0.0
*	S Q	14	10 a	14	Ee	4	s12-1	nu4	c1436.31575	0.0	0.455E-04	3140.46198	1704.14728	0.0
	P P	12	12 s	11	A2o	1	s11-1	nu4	1436.51962	34.3	0.718E-01	2448.52257	1012.00638	1.0
*	N P	12	3 s	11	A2e	9	s 0 0	2nu2	1436.51962	55.2	0.201E-02	2936.91815	1500.40405	0.0
	P P	12	12 a	11	A2e	1	a11-1	nu4	1436.69114	-30.6	0.714E-01	2449.74880	1013.05460	0.0
*	* P	13	2 a	12	Ee	21	* * *	**	n1436.74470	0.0	0.291E-03	3206.75769	1770.01299	0.0
	R P	9	5 a	8	Eo	6	a 6 1	nu4	1437.10220	-17.5	0.289E-02	2236.03878	798.93483	1.0
	P P	13	3 a	12	A2o	10	a 2-1	nu4	n1437.14523	0.0	0.294E-02	3189.79343	1752.64820	0.0
*	* P	12	1 s	11	Ee	19	* * *	**	n1437.51295	0.0	0.130E-02	2965.94632	1528.43337	0.0
	P P	12	11 s	11	Ee	3	s10-1	nu4	1437.67980	-6.2	0.237E-01	2535.11748	1097.43706	1.0
	Q P	9	2 a	8	Ee	9	s 2 0	2nu2	1438.15460	27.5	0.148E-02	2312.76829	874.61644	1.0
	P P	12	11 a	11	Eo	3	a10-1	nu4	1438.26704	-5.7	0.240E-01	2536.56179	1098.29418	1.0
*	O P	13	4 a	12	Eo	20	a 2 1	nu4	n1438.31853	0.0	0.314E-03	3166.37382	1728.05529	0.0
	Q P	8	5 a	7	Eo	4	s 5 0	2nu2	1438.38766	-50.9	0.158E-03	2060.08568	621.69293	1.0
*	* P	12	1 s	11	Eo	20	* * *	**	1438.38770	355.8	0.264E-02	2966.78549	1528.43337	1.0
*	S P	7	2 s	6	Eo	5	a 4-1	nu4	1438.46820	8.5	0.723E-03	1978.31225	539.84490	1.0
	P P	12	2 s	11	Eo	20	s 1-1	nu4	1438.47600	36.5	0.400E-02	2956.41333	1517.94098	1.0
*	P P	10	2 s	9	Eo	13	s 1 0	2nu2	c1438.49966	0.0	0.138E-03	2508.44530	1069.94630	0.0
	P P	12	10 s	11	Eo	4	s 9-1	nu4	1438.56787	-20.3	0.164E-01	2613.17796	1174.60806	1.0
	P P	12	4 a	11	Eo	15	s 3-1	nu4	1438.56810	-10.6	0.412E-02	2914.40214	1475.83298	1.0
*	* P	13	2 a	12	Ee	22	* * *	**	1438.59093	0.0	0.107E-02	3208.60392	1770.01299	0.0
*	S Q	14	10 s	14	Eo	4	a12-1	nu4	1438.72814	-21.9	0.458E-04	3142.36832	1703.63799	1.0
*	* P	13	1 a	12	Eo	23	* * *	**	n1439.06704	0.0	0.126E-02	3219.46317	1780.39613	0.0
	P P	12	9 s	11	A2e	3	s 8-1	nu4	1439.19203	-29.3	0.237E-01	2682.96210	1243.76714	1.0
	P P	12	5 s	11	Ee	14	s 4-1	nu4	1439.24350	4.1	0.487E-02	2883.34833	1444.10524	1.0
	P P	12	3 s	11	A2e	10	s 2-1	nu4	1439.28407	-40.2	0.643E-02	2939.69214	1500.40405	1.0
	R P	8	6 s	7	A2o	1	s 7 1	nu4	1439.30020	-3.9	0.602E-02	2020.08022	580.77963	1.0
	R P	9	4 s	8	Eo	7	s 5 1	nu4	1439.33690	1.1	0.459E-02	2270.27698	830.94019	1.0
	P P	12	8 s	11	Eo	8	s 7-1	nu4	1439.56305	-21.9	0.893E-02	2744.69261	1305.12737	1.0
*	Q P	11	1 a	10	Eo	18	s 1-1	nu4	1439.57131	-28.2	0.198E-03	2735.11953	1295.54540	1.0
	P P	12	6 s	11	A2o	6	s 5-1	nu4	1439.58260	1.9	0.115E-01	2844.73618	1405.15377	1.0
	P P	12	10 a	11	Ee	4	a 9-1	nu4	1439.64771	17.1	0.169E-01	2614.96760	1175.32160	1.0
	P P	12	7 a	11	Ee	10	s 6-1	nu4	1439.69000	-8.5	0.702E-02	2798.56207	1358.87122	1.0
*	S Q	11	9 a	11	A2o	1	s11-1	nu4	1440.01540	40.9	0.382E-03	2448.52257	1008.51126	1.0
*	* P	13	4 a	12	Ee	20	* * *	**	n1440.10204	0.0	0.739E-03	3168.44962	1728.34758	0.0
*	O P	14	5 s	13	Ee	19	a 3 1	nu4	1440.19293	-106.7	0.691E-04	3407.68025	1967.47665	1.0
*	O P	14	5 a	13	Eo	19	s 3 1	nu4	1440.35494	35.3	0.971E-04	3408.09388	1967.74247	1.0
*	S P	8	1 a	7	Eo	8	s 3-1	nu4	1440.64360	-2.3	0.849E-03	2149.39043	708.74660	1.0
	Q P	9	1 a	8	Eo	11	s 1 0	2nu2	1440.66100	47.8	0.164E-02	2326.02586	885.36964	1.0
	P P	12	9 a	11	A2o	4	a 8-1	nu4	1440.86419	23.7	0.248E-01	2685.23360	1244.37178	1.0
*	O P	15	6 s	14	A2o	10	a 4 1	nu4	c1441.74685	0.0	0.408E-04	3660.39863	2218.65547	0.0
*	S Q	11	9 s	11	A2e	1	a11-1	nu4	1441.93930	-10.8	0.392E-03	2449.74880	1007.80842	1.0
	P P	12	8 a	11	Ee	9	a 7-1	nu4	1441.95538	19.2	0.950E-02	2747.60228	1305.64882	1.0
*	S P	9	1 s	8	Ee	11	a 3 1	nu4	c1441.97089	0.0	0.118E-03	2326.88564	884.91558	0.0
*	O P	15	6 a	14	A2e	11	s 4 1	nu4	c1442.03601	0.0	0.482E-04	3660.92263	2218.89848	0.0
*	R P	8	1 s	7	Ee	7	s 2 0	2nu2	1442.14177	20.1	0.497E-04	2150.37824	708.23848	1.0
	R P	8	6 a	7	A2e	2	a 7 1	nu4	1442.33228	23.3	0.772E-02	2023.80070	581.47075	1.0
	P P	12	7 a	11	Eo	9	a 6-1	nu4	1442.93674	-35.0	0.754E-02	2802.26909	1359.32885	1.0
	R P	9	4 a	8	Ee	7	a 5 1	nu4	1443.73670	2.0	0.243E-02	2275.19451	831.45801	1.0
*	S P	8	1 s	7	Ee	8	a 3-1	nu4	1443.88700	20.1	0.832E-03	2152.12347	708.23848	1.0
	P P	12	6 a	11	A2e	6	a 5-1	nu4	1443.90656	-16.5	0.125E-01	2849.47064	1405.56243	1.0
*	T Q	12	6 s	12	A2o	3	s 9 0	2nu2	c1444.00314	0.0	0.241E-04	2849.15114	1405.15377	0.0
	Q P	8	4 a	7	Ee	4	s 4 0	2nu2	1444.13763	-23.2	0.606E-03	2098.59022	654.45027	1.0
*	S Q	15	10 a	15	Ee	6	s12-1	nu4	c1444.55908	0.0	0.185E-04	3440.52761	1995.97688	0.0
	P P	12	5 a	11	Eo	14	a 4-1	nu4	1444.81300	-16.1	0.524E-02	2889.29120	1444.47659	1.0
	P P	12	4 a	11	Eo	16	a 3-1	nu4	1445.22347	-132.8	0.381E-02	2921.41309	1476.17634	0.0
	R P	9	3 s	8	A2e	5	s 4 1	nu4	1445.40869	-11.9	0.838E-02	2301.58870	856.17882	1.0
*	T P	13	6 a	12	A2e	8	a 9 0	2nu2	c1445.47282	0.0	0.124E-04	3103.90006	1658.42705	0.0
*	Q P	10	2 a	9	Ee	14	s 2 1	nu4	c1445.51997	0.0	0.320E-04	2516.87476	1070.35781	0.0
*	S Q	12	9 a	12	A2o	1	s11-1	nu4	c1446.66946	0.0	0.369E-03	2691.04234	1244.37178	0.0
*	T P	12	7 a	11	Eo	10	a10 0	2nu2	n1447.12802	0.0	0.335E-04	2806.45688	1359.32885	0.0
*	S Q	15	10 s	15	Eo	6	a12-1	nu4	c1447.42255	0.0	0.185E-04	3442.98424	1995.55410	0.0
*	* P	12	2 a	11	Ee	19	* * *	**	n1447.69606	0.0	0.282E-02	2965.94632	1518.25026	0.0
*	* P	12	4 a	11	Ee	17	* * *	**	n1447.73485	0.0	0.247E-03	2923.91119	1476.17634	0.0
	P P	12	3 a	11	A2o	10	a 2-1	nu4	1447.85770	153.5	0.894E-02	2948.60757	1500.76522	1.0
	R P	8	5 s	7	Ee	3	s 6 1	nu4	1447.90820	13.8	0.623E-02	2068.97237	621.06555	1.0
*	* P	10	2 s	9	Eo	14	* * *	**	c1448.05623	0.0	0.118E-04	2517.99678	1069.94630	0.0
*	Q P	11	1 s	10	Ee	17	a 1-1	nu4	c1448.26004	0.0	0.470E-04	2743.45226	1295.19577	0.0
*	O P	11	3 s	10	A2e	8	a 1 1	nu4	1448.36700	18.8	0.900E-02	2715.30247	1266.93735	1.0
*	* P	12	1 a	11	Eo	21	* * *	**	n1448.55759	0.0	0.381E-02	2977.29226	1528.73467	0.0
*	* P	12	2 a	11	Ee	20	* * *	**	1448.56870	334.7	0.129E-02	2966.78549	1518.25026	0.0
	R P	12	0 a	11	A2e	11	a 1 1	nu4	1448.74994	120.6	0.750E-02	2980.96435	1532.22647	1.0
*	S Q	12	9 s	12	A2e	2	a11-1	nu4	1448.75030	-44.3	0.375E-03	2692.52187	1243.76714	0.0
	R P	9	3 a	8	A2o	5	a 4 1	nu4	1448.78800	14.7	0.328E-02	2305.44496	856.65843	1.0
	Q P	8	3 a	7	A2o	3	s 3 0	2nu2	1448.89388	7.7	0.210E-02	2128.72982	679.83671	1.0

*	U P	7	0 s	6	A2o	3	a 4 1	nu4	c1448.90073	0.0	0.304E-03	2003.29416	554.39306	0.0
	Q P	7	6 a	6	A2e	1	s 6 0	2nu2	1449.21660	4.5	0.417E-02	1872.43896	423.22281	1.0
	R P	11	0 s	10	A2o	9	s 1 1	nu4	1449.49488	-6.1	0.206E-01	2748.21793	1298.72244	1.0
*	* P	13	2 s	12	Eo	23	* * *	**	n1449.71350	0.0	0.201E-04	3219.46317	1769.74967	0.0
	P P	11	1 s	10	Ee	18	s 0 1	nu4	1449.79250	-79.7	0.104E-01	2744.99624	1295.19577	1.0
	R P	9	2 s	8	Eo	10	s 3 1	nu4	1450.17700	-33.6	0.248E-02	2324.33065	874.15029	1.0
*	U Q	9	5 s	9	Ee	3	a 9 1	nu4	c1450.27234	0.0	0.181E-04	2248.64641	798.37451	0.0
	P P	11	2 s	10	Eo	18	s 1-1	nu4	1450.51273	-4.7	0.105E-01	2735.11953	1284.60633	1.0
*	S P	9	0 s	8	A2o	6	a 2-1	nu4	1450.84500	-27.2	0.196E-02	2339.34844	888.50072	1.0
	R P	8	5 a	7	Eo	5	a 6 1	nu4	1451.52039	4.8	0.589E-02	2073.21284	621.69293	1.0
	P P	11	4 s	10	Eo	13	s 3-1	nu4	1451.76229	15.3	0.114E-01	2693.86729	1242.10653	1.0
*	P P	9	2 s	8	Eo	11	s 1 0	2nu2	1451.88230	67.3	0.496E-03	2326.02586	874.15029	1.0
*	Q P	10	1 a	9	Eo	16	s 1-1	nu4	1452.20950	-30.1	0.434E-03	2533.24023	1081.02772	1.0
	R P	9	2 a	8	Ee	11	a 3 1	nu4	1452.27034	11.4	0.813E-03	2326.88564	874.61644	1.0
	Q P	8	2 a	7	Ee	7	s 2 0	2nu2	1452.46322	19.9	0.137E-02	2150.37824	697.91701	1.0
	P P	11	11 s	10	Ee	2	s10-1	nu4	1452.65216	49.0	0.689E-01	2312.64800	860.00074	1.0
	P P	11	5 s	10	Ee	12	s 4-1	nu4	1452.66831	2.5	0.131E-01	2662.74905	1210.08099	1.0
*	S P	6	2 a	5	Ee	3	s 4-1	nu4	1452.70460	-5.9	0.593E-03	1854.98294	402.27775	1.0
	P P	11	11 a	10	Eo	1	a10-1	nu4	1452.83266	-35.1	0.686E-01	2313.83474	860.99857	1.0
	P P	11	6 s	10	A2o	5	s 5-1	nu4	1453.31919	-13.4	0.312E-01	2624.08137	1170.76084	1.0
	P P	11	10 s	10	Eo	2	s 9-1	nu4	1453.34070	4.5	0.469E-01	2391.29848	937.95823	1.0
	R P	9	1 s	8	Ee	12	s 2 1	nu4	1453.55650	-5.6	0.934E-03	2338.47264	884.91558	1.0
	P P	11	7 s	10	Ee	8	s 6-1	nu4	1453.72490	-20.8	0.193E-01	2577.76266	1124.03568	1.0
	P P	11	9 s	10	A2e	2	s 8-1	nu4	1453.74414	-22.9	0.668E-01	2461.55485	1007.80842	1.0
*	S Q	13	9 a	13	A2o	2	s11-1	nu4	1453.81440	-16.6	0.217E-03	2952.67265	1498.85659	1.0
	P P	11	8 s	10	Eo	6	s 7-1	nu4	1453.87045	-22.4	0.248E-01	2523.64417	1069.77148	1.0
	P P	11	10 a	10	Ee	3	a 9-1	nu4	1453.92337	-7.6	0.475E-01	2392.71235	938.78822	1.0
*	O P	11	4 a	10	Ee	13	s 2 0	2nu2	c1453.95387	0.0	0.120E-04	2696.46292	1242.50505	0.0
*	T Q	13	6 s	13	A2o	4	s 9 0	2nu2	c1454.21737	0.0	0.155E-04	3112.31371	1658.07925	0.0
*	O P	12	4 s	11	Eo	17	a 2 1	nu4	1454.24280	1.4	0.424E-03	2930.07564	1475.83298	1.0
	R P	9	1 a	8	Eo	12	a 2 1	nu4	c1454.26545	0.0	0.134E-03	2339.63141	885.36964	0.0
	Q P	7	5 a	6	Eo	2	s 5 0	2nu2	c1454.59310	0.0	0.263E-03	1918.29396	463.70701	0.0
	Q P	8	1 a	7	Eo	9	s 1 0	2nu2	1454.64340	1.1	0.141E-02	2163.38989	708.74660	0.0
*	S P	6	2 s	5	Eo	3	a 4-1	nu4	1454.64510	48.9	0.617E-03	1856.28804	401.64783	0.0
*	* P	11	3 s	10	A2e	9	* * *	**	1454.76310	-120.9	0.136E-01	2721.71254	1266.93735	1.0
	P P	11	9 a	10	A2o	3	a 8-1	nu4	1454.80614	16.3	0.689E-01	2463.31577	1008.51126	1.0
*	* P	12	4 a	11	Ee	18	* * *	**	n1455.25460	0.0	0.891E-03	2931.43094	1476.17634	0.0
	Q P	8	0 a	7	A2e	5	s 0 0	2nu2	1455.43161	47.2	0.294E-02	2167.78007	712.35318	1.0
	R P	8	4 s	7	Eo	6	s 5 1	nu4	1455.45679	6.4	0.852E-02	2109.32675	653.87060	1.0
	P P	11	8 a	10	Ee	7	a 7-1	nu4	1455.50939	21.6	0.261E-01	2525.88453	1070.37730	1.0
*	S P	8	1 a	7	Eo	10	s 3 1	nu4	1455.99545	15.3	0.224E-03	2164.74052	708.74660	1.0
	P P	11	7 a	10	Eo	7	a 6-1	nu4	1456.06952	15.3	0.206E-01	2580.63514	1124.56715	1.0
*	S Q	13	9 s	13	A2e	3	a11-1	nu4	1456.19230	14.5	0.218E-03	2954.53333	1498.34248	1.0
*	S P	7	1 a	6	Eo	6	s 3-1	nu4	1456.31320	-1.8	0.112E-02	2007.63372	551.32034	1.0
*	O P	13	5 s	12	Ee	17	a 3 1	nu4	1456.33030	-0.9	0.156E-03	3152.97220	1696.64181	1.0
	P P	11	6 a	10	A2e	5	a 5-1	nu4	1456.52980	0.5	0.337E-01	2627.76507	1171.23532	1.0
*	O P	13	5 a	12	Eo	17	s 3 1	nu4	c1456.76136	0.0	0.193E-03	3153.72715	1696.95789	0.0
	P P	11	5 a	10	Eo	12	a 4-1	nu4	1456.92471	-18.8	0.143E-01	2667.43865	1210.51206	1.0
	P P	11	4 a	10	Ee	14	a 3-1	nu4	1457.19061	-45.8	0.120E-01	2699.70024	1242.50505	1.0
*	R P	7	1 s	6	Ee	6	s 2 0	2nu2	c1457.29767	0.0	0.648E-04	2008.05676	550.75859	0.0
*	O P	13	3 a	12	A2o	11	s 1 1	nu4	1457.75450	72.2	0.377E-04	3210.39548	1752.64820	1.0
*	O P	14	6 s	13	A2o	9	a 4 1	nu4	1457.78152	-6.6	0.114E-03	3387.10358	1929.32140	1.0
	P P	11	3 a	10	A2o	8	a 2-1	nu4	1458.10272	4.2	0.237E-01	2725.39127	1267.28897	1.0
*	O P	14	6 a	13	A2e	10	s 4 1	nu4	n1458.25964	0.0	0.130E-03	3387.87345	1929.61381	0.0
	P P	11	2 a	10	Ee	17	a 1-1	nu4	1458.49180	47.8	0.111E-01	2743.45226	1284.96524	1.0
*	S Q	10	8 a	10	Ee	2	s10-1	nu4	1458.74590	46.6	0.349E-03	2312.64800	853.90676	1.0
*	O P	15	7 s	14	Ee	18	a 5 1	nu4	c1458.76142	0.0	0.201E-04	3632.60272	2173.83620	0.0
*	* P	11	1 a	10	Eo	19	* * *	**	1458.77790	-37.1	0.104E-01	2754.32701	1295.54540	1.0
*	S P	8	1 s	7	Ee	9	a 3 1	nu4	1458.85505	-11.2	0.151E-03	2167.09465	708.23848	1.0
*	N P	12	4 s	11	Eo	19	s 1 0	2nu2	c1458.89137	0.0	0.885E-04	2934.69514	1475.83298	0.0
	R P	8	4 a	7	Ee	5	a 5 1	nu4	1458.94575	2.5	0.645E-02	2113.39577	654.45027	1.0
*	S P	7	1 s	6	Ee	7	a 3-1	nu4	1458.96040	6.9	0.113E-02	2009.71830	550.75859	1.0
*	T Q	10	5 s	10	Ee	5	s 8 0	2nu2	c1458.99176	0.0	0.280E-04	2453.76820	994.77313	0.0
*	O P	15	7 a	14	Eo	19	s 5 1	nu4	n1459.34958	0.0	0.219E-04	3633.45771	2174.10813	0.0
*	* P	12	2 s	11	Eo	21	* * *	**	n1459.35128	0.0	0.566E-04	2977.29226	1517.94098	0.0
*	Q P	10	1 s	9	Ee	15	a 1-1	nu4	1459.56500	-66.5	0.752E-04	2540.19851	1080.62686	1.0
	Q P	7	4 a	6	Ee	3	s 4 0	2nu2	c1459.85805	0.0	0.113E-04	1956.53845	496.67614	0.0
*	O P	11	2 a	10	Ee	18	s 0 1	nu4	c1460.02295	0.0	0.339E-04	2744.99624	1284.96524	0.0
*	S P	8	0 a	7	A2e	6	s 2-1	nu4	1460.46200	42.3	0.460E-02	2172.81095	712.35318	1.0
*	S Q	10	8 s	10	Eo	1	a10-1	nu4	1460.62090	-26.4	0.358E-03	2313.83474	853.21120	1.0
*	N P	10	3 s	9	A2e	7	s 0 0	2nu2	1460.75400	15.1	0.264E-02	2512.85889	1052.10640	1.0
*	S Q	14	9 a	14	A2o	3	s11-1	nu4	c1461.43480	0.0	0.972E-04	3233.17343	1771.74237	0.0
*	O P	14	3 s	13	A2e	13	a 1 1	nu4	n1461.68718	0.0	0.193E-04	3484.29743	2022.61025	0.0
	R P	8	3 s	7	A2e	4	s 4 1	nu4	1461.95691	-7.8	0.184E-01	2141.24555	679.28786	1.0
*	U P	6	0 a	5	A2e	2	s 4 1	nu4	c1462.15197	0.0	0.443E-04	1879.03974	416.88774	0.0
	P P	10	1 s	9	Ee	16	s 0 1	nu4	1462.19019	-21.2	0.247E-01	2542.81917	1080.62686	1.0
*	* P	11	4 a	10	Ee	15	* * *	**	c1462.26101	0.0	0.389E-04	2704.76900	1242.50505	0.0
	P P	10	2 s	9	Eo	16	s 1-1	nu4	1463.29138	-25.5	0.250E-01	2533.24023	1069.94630	1.0
*	T Q	7	4 s	7	Eo	1	s 7 0	2nu2	c1463.69907	0.0	0.130E-04	1959.73389	496.03508	0.0
*	Q P	9	2 a	8	Ee	12	s 2 1	nu4	1463.85569	-5.1	0.255E-04	2338.47264	874.61644	1.0
	R P	7	5 s	6	Ee	2	s 6 1	nu4	1464.00060	-5.8	0.554E-02	1927.01422	463.01304	1.0
*	S Q	14	9 s	14	A2e	4	a11-1	nu4	c1464.25632	0.0	0.968E-04	3235.56890	1771.31036	0.0
	Q P	7	3 a	6	A2o	2	s 3 0	2nu2	1464.30060	-27.9	0.569E-03	1986.52632	522.22293	1.0
	P P	10	3 s	9	A2e	8	s 2-1	nu4	1464.63190	80.7	0.497E-01	2516.73023	1052.10640	1.0
*	S Q	11	8 a	11	Ee	3	s10-1	nu4	1464.73930	-8.8	0.371E-03	2535.11748	1070.37730	1.0
	R P	8	3 a	7	A2o	4	a 4 1	nu4	1464.81350	-5.9	0.113E-01	2144.65080	679.83671	1.0
*	T P	5	0 s	4	A2o	1	s 3 0	2nu2	c1465.21751	0.0	0.732E-04	1762.86198	297.64176	0.0
	P P	10	4 s	9	Eo	11	s 3-1	nu4	1465.60437	13.8	0.277E-01	2492.68147	1027.07848	1.0
*	Q P	9	1 a	8	Eo	13	s 1-1	nu4	1465.65270	-24.4	0.864E-03	2351.02478	885.36964	1.0
	R P	7	5 a	6	Eo	3	a 6 1	nu4	1466.20780	30.5	0.682E-02	1929.91176	463.70701	1.0
*	S Q	11	8 s	11	Eo	3	a10-1	nu4	1466.79160	12.9	0.378E-03	2536.56179	1069.77148	0.0
	P P	10	5 s	9	Ee	10	s 4-1	nu4	1466.82043	-0.2	0.320E-01	2461.59358	994.77313	1.0
*	O P	10	3 a	9	A2o	7	s 1 1	nu4	1466.89783	39.6	0.140E-01	2519.44370	1052.54983	1.0
	R P	8	2 s	7	Eo	10	s 3 1	nu4	1467.34521	0.2	0.769E-02	2164.74052	697.39533	1.0
*	O P	10	4 a	9	Ee	11	s 2 0	2nu2	c1467.43721	0.0	0.231E-04	2494.97342	1027.53549	0.0
	Q P	7	2 a	6	Ee	6	s 2 0	2nu2	1467.63462	-4.6	0.640E-03	2008.05676	540.42168	1.0
	P P	10	6 s	9	A2o	4	s 5-1	nu4	1467.77832	-12.7	0.771E-01	2422.88602	955.10643	1.0
*	T Q	11	5 s	11	Ee	6	s 8 0	2nu2	c1467.78601	0.0	0.276E-04	2677.86748	1210.08099	0.0
*	N P	11	4 s	10	Eo	15	s 1 0	2nu2	1468.28528	-75.3	0.254E-03	2710.39934	1242.10653	1.0
	P P	10	7 s	9	Ee	6	s 6-1	nu4	1468.45935	-20.2	0.484E-01	2376.42640	907.96503	1.0
	P P	10	10 s	9	Eo	1	s 9-1	nu4	1468.73633	46.5	0.124E+00	2188.91078	720.17910	1.0
	P P	10	8 s	9	Eo	5	s 7-1	nu4	1468.84998	-15.1	0.633E-01	2322.06269	853.21120	1.0
	P P	10	10 a	9	Ee	1	a 9-1	nu4	1468.92654	-42.0	0.123E+00	2190.06398	721.13324	1.0
	P P	10	9 s	9	A2e	1	s 8-1	nu4	1468.94299	1.3	0.173E+00	2259.62339	790.68053	1.0
	R P	8	2 a	7	Ee	9	a 3 1	nu4	1469.17620	-14.4	0.356E-02	2167.09465	697.91701	1.0
*	S Q	15	9 a	15	A2o	4	s11-1	nu4	c1469.50476	0.0	0.359E-04	3532.29023	2062.79689	0.0
	P P	10	9 a	9	A2o	2	a 8-1	nu4	1469.52185	-10.6	0.175E+00	2261.01085	791.48794	1.0
	Q P	7	1 a	6	Eo	7	s 1 0	2nu2	1469.69867	16.7	0.878E-03	2021.01734	551.32034	1.0

* * P	11	2 s	10	Eo	19	* * *	**	c1469.71715	0.0	0.143E-03	2754.32701	1284.60633	0.0
R P	10	0 a	9	A2e	9	a 1 1	nu4	1469.75745	-76.0	0.502E-01	2554.34625	1084.58120	1.0
P P	10	1 a	9	Eo	17	a 0 1	nu4	1469.76790	-88.5	0.255E-01	2550.80447	1081.02772	0.0
P P	10	4 a	9	Ee	12	a 3-1	nu4	1469.76790	-7.9	0.300E-01	2497.30418	1027.53549	0.0
* S P	5	2 a	4	Ee	2	s 4-1	nu4	1469.83580	4.3	0.283E-03	1753.45203	283.61666	1.0
P P	10	2 a	9	Ee	15	a 1-1	nu4	1469.83606	-46.4	0.270E-01	2540.19851	1070.35781	1.0
P P	10	8 a	9	Ee	5	a 7-1	nu4	1469.89172	11.8	0.654E-01	2323.79730	853.90676	1.0
P P	10	5 a	9	Eo	10	a 4-1	nu4	1469.96375	-2.3	0.348E-01	2465.23154	995.26756	1.0
P P	10	7 a	9	Eo	6	a 6-1	nu4	1470.06299	19.0	0.509E-01	2378.63605	908.57496	1.0
P P	10	6 a	9	A2e	4	a 5-1	nu4	1470.07263	18.2	0.825E-01	2425.72158	955.65077	1.0
R P	8	1 s	7	Ee	10	s 2 1	nu4	1471.13140	-22.8	0.305E-02	2179.37216	708.23848	0.0
* S Q	12	8 a	12	Ee	5	s10-1	nu4	1471.24580	-23.2	0.241E-03	2776.89694	1305.64882	1.0
* S P	5	2 s	4	Eo	1	a 4-1	nu4	1471.57990	-33.6	0.299E-03	1754.52040	282.93714	1.0
P P	10	3 a	9	A2o	8	a 2-1	nu4	1471.62109	-59.7	0.441E-01	2524.17689	1052.54983	1.0
* Q P	9	1 s	8	Ee	13	a 1-1	nu4	1471.75990	-36.1	0.511E-03	2356.67909	884.91558	1.0
Q P	6	5 a	5	Eo	1	s 5 0	2nu2	1471.84917	89.7	0.345E-02	1796.96739	325.12719	0.0
R P	7	4 s	6	Eo	4	s 5 1	nu4	1471.85057	-3.0	0.118E-01	1967.88595	496.03508	0.0
R P	8	1 a	7	Eo	11	a 2 1	nu4	c1471.88729	0.0	0.927E-03	2180.63260	708.74660	0.0
* O P	12	5 s	11	Ee	15	a 3 1	nu4	c1471.97513	0.0	0.289E-03	2916.08164	1444.10524	0.0
* O P	11	4 a	10	Ee	16	s 2 1	nu4	1472.00230	56.2	0.118E-02	2714.50173	1242.50505	1.0
* O P	10	2 a	9	Ee	16	s 0 1	nu4	1472.45930	-20.6	0.105E-03	2542.81917	1070.35781	1.0
* S P	6	1 a	5	Eo	4	s 3-1	nu4	1472.72440	2.9	0.116E-02	1885.96189	413.23778	1.0
* S Q	15	9 s	15	A2e	5	a11-1	nu4	1472.95522	-78.6	0.353E-04	3535.40125	2062.43817	1.0
* S P	7	1 a	6	Eo	8	s 3 1	nu4	1473.03744	-1.8	0.813E-04	2024.35796	551.32034	1.0
* R P	6	1 s	5	Ee	4	s 2 0	2nu2	c1473.32471	0.0	0.644E-04	1885.95123	412.62430	0.0
* S Q	12	8 s	12	Eo	5	a10-1	nu4	1473.58890	-30.2	0.243E-03	2778.71929	1305.12737	0.0
* O P	12	5 a	11	Eo	16	s 3 1	nu4	1473.61100	32.5	0.414E-03	2918.08434	1444.47659	1.0
* O P	13	6 s	12	A2o	8	a 4 1	nu4	1473.61100	21.9	0.286E-03	3131.68806	1658.07925	0.0
* M P	11	4 s	10	Eo	16	a 0 1	nu4	1473.75090	-2.3	0.604E-03	2715.85766	1242.10653	1.0
R P	7	4 a	6	Ee	4	a 5 1	nu4	1474.42615	14.6	0.114E-01	1971.10083	496.67614	1.0
* O P	14	7 s	13	Ee	16	a 5 1	nu4	c1474.54981	0.0	0.596E-04	3358.53654	1883.99402	0.0
R P	9	0 s	8	A2o	7	s 1 1	nu4	1474.72534	10.5	0.105E+00	2363.22501	888.50072	1.0
* O P	13	6 a	12	A2e	9	s 4 1	nu4	1474.84980	-72.1	0.335E-03	3133.28406	1658.42705	1.0
* S P	6	1 s	5	Ee	5	a 3-1	nu4	1474.94950	-2.9	0.121E-02	1887.57409	412.62430	1.0
* O P	15	8 s	14	Eo	17	a 6 1	nu4	c1475.09017	0.0	0.226E-04	3596.87180	2121.81062	0.0
* O P	16	9 s	15	A2e	8	a 7 1	nu4	c1475.32847	0.0	0.157E-04	3846.76937	2371.48597	0.0
P P	9	1 s	8	Ee	14	s 0 1	nu4	1475.33545	4.4	0.524E-01	2360.25059	884.91558	1.0
* O P	14	7 a	13	Eo	17	s 5 1	nu4	n1475.62960	0.0	0.657E-04	3359.95098	1884.32138	0.0
* S P	7	1 s	6	Ee	8	a 3 1	nu4	c1475.90939	0.0	0.151E-03	2026.67007	550.75859	0.0
* O P	15	8 a	14	Ee	17	s 6 1	nu4	1476.13137	258.4	0.243E-04	3598.22580	2122.12027	1.0
* U Q	8	4 s	8	Eo	2	a 8 1	nu4	c1476.21696	0.0	0.278E-04	2130.08622	653.87060	0.0
* U Q	9	4 a	9	Ee	4	s 8 1	nu4	c1476.29418	0.0	0.113E-04	2307.75139	831.45801	0.0
* O P	16	9 a	15	A2o	9	s 7 1	nu4	c1476.32599	0.0	0.168E-04	3848.11122	2371.78028	0.0
Q P	6	4 a	5	Ee	1	s 4 0	2nu2	c1476.45884	0.0	0.110E-02	1834.74695	358.28449	0.0
P P	9	2 s	8	Eo	13	s 1-1	nu4	1476.87231	-21.8	0.529E-01	2351.02478	874.15029	1.0
* T Q	12	5 s	12	Ee	8	s 8 0	2nu2	c1476.95693	0.0	0.201E-04	2921.05371	1444.10524	0.0
* S Q	9	7 a	9	Eo	1	s 9-1	nu4	1477.36220	-6.2	0.591E-03	2188.91078	711.54796	0.0
P P	9	3 s	8	A2e	6	s 2-1	nu4	1478.12708	29.0	0.100E+00	2334.30300	856.17882	1.0
* S Q	13	8 a	13	Ee	6	s10-1	nu4	1478.25260	-12.2	0.119E-03	3037.76527	1559.51145	1.0
* * P	10	4 a	9	Ee	13	* * *	**	c1478.50288	0.0	0.112E-04	2506.03598	1027.53549	0.0
R P	7	3 s	6	A2e	3	s 4 1	nu4	1478.70337	-2.9	0.325E-01	2000.32559	521.62193	1.0
* S P	7	0 s	6	A2o	4	a 2-1	nu4	1479.14270	22.1	0.579E-02	2033.53355	554.39306	1.0
* S Q	9	7 s	9	Ee	1	a 9-1	nu4	1479.20563	-20.5	0.609E-03	2190.06398	710.85630	1.0
* * P	12	5 s	11	Ee	17	* * *	**	n1479.80595	0.0	0.682E-04	2923.91119	1444.10524	0.0
* Q P	8	1 a	7	Eo	12	s 1-1	nu4	1479.95180	-10.5	0.156E-02	2188.69945	708.74660	1.0
P P	9	4 s	8	Eo	9	s 3-1	nu4	1480.18298	8.2	0.606E-01	2311.12235	830.94019	1.0
Q P	6	3 a	5	A2o	2	s 3 0	2nu2	1480.56194	38.5	0.362E-03	1864.53554	383.97745	0.0
* O P	12	3 s	11	A2e	11	a 1 1	nu4	c1480.57236	0.0	0.183E-03	2980.96435	1500.40405	0.0
* O P	10	2 s	9	Eo	17	a 0 1	nu4	1480.84958	-85.9	0.327E-03	2550.80447	1069.94630	1.0
* O P	11	3 a	10	A2o	9	s 1 1	nu4	1480.92810	-8.6	0.423E-03	2748.21793	1267.28897	1.0
* S Q	13	8 s	13	Eo	7	a10-1	nu4	1481.04540	17.5	0.119E-03	3040.11154	1559.06789	1.0
R P	7	3 a	6	A2o	3	a 4 1	nu4	1481.07080	-4.3	0.259E-01	2003.29416	522.22293	1.0
* P P	7	2 s	6	Eo	7	s 1 0	2nu2	c1481.17372	0.0	0.684E-04	2021.01734	539.84490	0.0
* O P	9	4 a	8	Ee	9	s 2 0	2nu2	c1481.31309	0.0	0.225E-04	2312.76829	831.45801	0.0
* N P	10	4 s	9	Eo	13	s 1 0	2nu2	1481.36589	-9.3	0.203E-03	2508.44530	1027.07848	1.0
P P	9	1 a	8	Eo	15	a 0 1	nu4	1481.57690	-48.5	0.557E-01	2366.95139	885.36964	1.0
P P	9	5 s	8	Ee	8	s 4-1	nu4	1481.71313	-5.0	0.711E-01	2280.08814	798.37451	1.0
* U P	5	0 s	4	A2o	2	a 4 1	nu4	c1481.81697	0.0	0.399E-04	1779.45716	297.64176	0.0
* U Q	10	4 a	10	Ee	6	s 8 1	nu4	c1481.89997	0.0	0.153E-04	2509.43447	1027.53549	0.0
P P	9	2 a	8	Ee	13	a 1-1	nu4	1482.05884	-38.1	0.581E-01	2356.67909	874.61644	1.0
P P	9	3 a	8	A2o	6	a 2-1	nu4	1482.68787	-21.4	0.123E+00	2339.34844	856.65843	1.0
* S Q	10	7 a	10	Eo	2	s 9-1	nu4	1482.72500	14.8	0.695E-03	2391.29848	908.57496	0.0
P P	9	6 s	8	A2o	3	s 5-1	nu4	1482.95020	-14.0	0.174E+00	2241.33686	758.38526	1.0
P P	9	4 a	8	Ee	10	a 3-1	nu4	1483.24316	4.1	0.661E-01	2314.70076	831.45801	1.0
* U Q	9	4 s	9	Eo	4	a 8 1	nu4	c1483.75497	0.0	0.512E-04	2314.69664	830.94019	0.0
P P	9	7 s	8	Ee	4	s 6-1	nu4	1483.87500	-12.1	0.111E+00	2194.73251	710.85630	1.0
P P	9	5 a	8	Eo	8	a 4-1	nu4	1483.94543	13.4	0.765E-01	2282.87892	798.93483	1.0
P P	9	8 s	8	Eo	3	s 7-1	nu4	1484.48040	4.3	0.148E+00	2140.12629	655.64632	1.0
P P	9	6 a	8	A2e	4	a 5-1	nu4	1484.51221	15.1	0.184E+00	2243.51303	759.00233	1.0
R P	7	2 s	6	Eo	8	s 3 1	nu4	1484.51221	-8.5	0.166E-01	2024.35796	539.84490	0.0
* S Q	10	7 s	10	Ee	3	a 9-1	nu4	c1484.74707	0.0	0.709E-03	2392.71235	907.96503	0.0
P P	9	9 s	8	A2e	1	s 8-1	nu4	1484.76599	41.9	0.413E+00	2077.34830	592.58650	1.0
P P	9	7 a	8	Eo	4	a 6-1	nu4	1484.89465	11.6	0.115E+00	2196.44145	711.54796	1.0
* Q P	8	1 s	7	Ee	11	a 1-1	nu4	1484.92040	-5.7	0.141E-02	2193.15945	708.23848	1.0
P P	9	9 a	8	A2o	1	a 8-1	nu4	1484.96619	-44.3	0.411E+00	2078.47368	593.50306	0.0
P P	9	8 a	8	Ee	3	a 7-1	nu4	1485.05396	-12.0	0.151E+00	2141.49061	656.43545	1.0
Q P	6	1 a	5	Eo	5	s 1 0	2nu2	c1485.60769	0.0	0.554E-04	1898.84702	413.23778	0.0
* O P	9	2 a	8	Ee	14	s 0 1	nu4	1485.63480	6.5	0.600E-03	2360.25059	874.61644	1.0
* S Q	14	8 a	14	Ee	8	s10-1	nu4	n1485.74057	0.0	0.485E-04	3317.48556	1831.74499	0.0
R P	7	2 a	6	Ee	8	a 3 1	nu4	1486.24658	-18.1	0.106E-01	2026.67007	540.42168	1.0
Q P	6	0 a	5	A2e	3	s 0 0	2nu2	c1486.26542	0.0	0.185E-03	1903.15391	416.88774	0.0
* N P	11	5 s	10	Ee	13	s 2 0	2nu2	1486.37857	-33.6	0.370E-03	2696.46292	1210.08099	1.0
* T Q	13	5 s	13	Ee	10	s 8 0	2nu2	c1486.63639	0.0	0.114E-04	3183.26853	1696.64181	0.0
* N P	13	6 s	12	A2o	9	s 3 0	2nu2	c1487.06929	0.0	0.212E-04	3145.19056	1658.07925	0.0
* U Q	11	4 a	11	Ee	7	s 8 1	nu4	c1487.62219	0.0	0.144E-04	2730.12612	1242.50505	0.0
* O P	9	3 s	8	A2e	7	a 1 1	nu4	1488.05811	-67.2	0.137E-01	2344.24365	856.17882	1.0
* N P	8	3 s	7	A2e	5	s 0 0	2nu2	1488.49640	41.9	0.245E-02	2167.78007	679.28786	1.0
R P	6	4 s	5	Eo	2	s 5 1	nu4	1488.59326	-5.8	0.977E-02	1846.17802	357.58418	1.0
* S Q	11	7 a	11	Eo	4	s 9-1	nu4	1488.60890	-19.1	0.498E-03	2613.17796	1124.56715	1.0
R P	7	1 s	6	Ee	9	s 2 1	nu4	1488.91480	-29.4	0.875E-02	2039.67633	550.75859	1.0
* O P	12	6 s	11	A2o	7	a 4 1	nu4	1488.96140	24.7	0.589E-03	2894.11270	1405.15377	1.0
* T Q	6	3 s	6	A2e	1	s 6 0	2nu2	c1489.12079	0.0	0.364E-04	1872.43896	383.31842	0.0
* S Q	14	8 s	14	Eo	9	a10-1	nu4	c1489.15448	0.0	0.477E-04	3320.52831	1831.37216	0.0
P P	8	1 s	7	Ee	12	s 0 1	nu4	1489.26208	26.7	0.991E-01	2197.49789	708.23848	1.0
* O P	10	4 a	9	Ee	14	s 2 1	nu4	1489.34230	30.3	0.177E-02	2516.87476	1027.53549	1.0
R P	7	1 a	6	Eo	9	a 2 1	nu4	1489.73840	-5.9	0.382E-02	2041.05933	551.32034	1.0
* * P	12	4 a	11	Ee	19	* * *	**	n1489.76998	0.0	0.121E-04	2965.94632	1476.17634	0.0
* S P	5	1 a	4	Eo	2	s 3-1	nu4	1489.82720	1.5	0.879E-03	1784.45704	294.62999	1.0

* O P	13	7 s	12	Ee	14	a 5 1	nu4	c1490.07632	0.0	0.154E-03	3102.33607	1612.26340	0.0
R P	6	4 a	5	Ee	2	a 5 1	nu4	1490.18469	22.3	0.114E-01	1848.46695	358.28449	1.0
* R P	5	1 s	4	Ee	3	s 2 0	2nu2	1490.18481	10.1	0.473E-04	1784.15206	293.96826	1.0
* S P	6	1 a	5	Eo	6	s 3 1	nu4	c1490.30120	0.0	0.399E-04	1903.53973	413.23778	0.0
* O P	14	8 s	13	Eo	15	a 6 1	nu4	n1490.54574	0.0	0.678E-04	3321.91790	1831.37216	0.0
* * P	12	4 a	11	Ee	20	* * *	**	n1490.60915	0.0	0.235E-04	2966.78549	1476.17634	0.0
* O P	15	9 s	14	A2e	7	a 7 1	nu4	c1490.66600	0.0	0.536E-04	3553.07739	2062.43817	0.0
* O P	11	5 a	10	Eo	14	s 3 1	nu4	1490.71350	46.1	0.841E-03	2701.22095	1210.51206	1.0
* * P	10	4 s	9	Eo	14	* * *	**	1490.92470	64.0	0.123E-02	2517.99678	1027.07848	1.0
* S Q	11	7 s	11	Ee	4	a 9-1	nu4	c1490.93394	0.0	0.503E-03	2614.96760	1124.03568	0.0
P P	8	2 s	7	Eo	12	s 1-1	nu4	1491.30286	-12.6	0.100E+00	2188.69945	697.39533	1.0
* T Q	10	4 s	10	Eo	5	s 7 0	2nu2	c1491.39051	0.0	0.579E-04	2518.47013	1027.07848	0.0
* * P	13	4 s	12	Eo	23	* * *	**	n1491.40788	0.0	0.139E-04	3219.46317	1728.05529	0.0
* O P	12	6 a	11	A2e	8	s 4 1	nu4	1491.59610	56.3	0.810E-03	2897.15290	1405.56243	1.0
* S P	5	1 s	4	Ee	4	a 3-1	nu4	1491.77190	-13.3	0.937E-03	1785.74149	293.96826	1.0
* T Q	7	3 s	7	A2e	1	s 6 0	2nu2	1491.81662	-61.8	0.394E-04	2013.44473	521.62193	1.0
* O P	16	10 a	15	Ee	16	s 8 1	nu4	n1491.95790	0.0	0.105E-04	3797.72022	2305.76232	0.0
* O P	13	7 a	12	Eo	15	s 5 1	nu4	1492.06290	-0.4	0.182E-03	3104.71571	1612.65277	1.0
* S P	6	0 a	5	A2e	4	s 2-1	nu4	1492.19280	1.7	0.716E-02	1909.08037	416.88774	1.0
* O P	15	9 a	14	A2o	8	s 7 1	nu4	n1492.19866	0.0	0.584E-04	3554.99555	2062.79689	0.0
* O P	14	8 a	13	Ee	15	s 6 1	nu4	1492.24030	-37.1	0.756E-04	3323.98900	1831.74499	1.0
* O P	9	2 s	8	Eo	15	a 0 1	nu4	1492.79690	-42.0	0.668E-03	2366.95139	874.15029	1.0
* S P	6	1 s	5	Ee	6	a 3 1	nu4	1493.07946	-11.3	0.109E-03	1905.70489	412.62430	1.0
* U Q	12	4 a	12	Ee	10	s 8 1	nu4	c1493.38155	0.0	0.104E-04	2969.55808	1476.17634	0.0
* P P	9	4 s	8	Eo	10	s 3 1	nu4	c1493.38661	0.0	0.118E-04	2324.33065	830.94019	0.0
P P	8	3 s	7	A2e	6	s 2-1	nu4	1493.52698	38.9	0.212E+00	2172.81095	679.28786	1.0
* S Q	15	8 a	15	Ee	10	s10-1	nu4	c1493.69612	0.0	0.168E-04	3615.80435	2122.12027	0.0
R P	8	0 a	7	A2e	7	a 1 1	nu4	1493.86328	-4.8	0.216E+00	2206.21694	712.35318	1.0
Q P	5	4 a	4	Ee	1	s 4 0	2nu2	1493.92680	4.5	0.557E-02	1733.33458	239.40823	1.0
P P	8	1 a	7	Eo	13	a 0 1	nu4	1494.24219	-2.2	0.108E+00	2202.98901	708.74660	1.0
* * P	11	5 s	10	Ee	15	* * *	**	1494.68497	-30.4	0.387E-03	2704.76900	1210.08099	1.0
* S Q	12	7 a	12	Eo	6	s 9-1	nu4	1495.01620	-29.0	0.272E-03	2854.34795	1359.32885	1.0
* N P	9	4 s	8	Eo	11	s 1 0	2nu2	1495.09413	84.6	0.233E-03	2326.02586	830.94019	1.0
* Q P	7	1 a	6	Eo	10	s 1-1	nu4	1495.13220	-8.9	0.251E-02	2046.45343	551.32034	1.0
P P	8	2 a	7	Ee	11	a 1-1	nu4	1495.24290	4.6	0.111E+00	2193.15945	697.91701	1.0
P P	8	4 s	7	Eo	8	s 3-1	nu4	1495.52002	1.9	0.120E+00	2149.39043	653.87060	1.0
R P	6	3 s	5	A2e	2	s 4 1	nu4	1495.72144	1.2	0.425E-01	1879.03974	383.31842	1.0
* T Q	8	3 s	8	A2e	2	s 6 0	2nu2	c1495.87407	0.0	0.255E-04	2175.16330	679.28786	0.0
* S Q	8	6 a	8	A2e	1	s 8-1	nu4	1495.88190	43.5	0.186E-02	2077.34830	581.47075	1.0
* O P	8	4 a	7	Ee	7	s 2 0	2nu2	c1495.93029	0.0	0.141E-04	2150.37824	654.45027	0.0
P P	8	3 a	7	A2o	5	a 2-1	nu4	1496.17395	31.4	0.219E+00	2176.00752	679.83671	1.0
* P P	6	2 s	5	Eo	5	s 1 0	2nu2	c1497.19764	0.0	0.103E-03	1898.84702	401.64783	0.0
P P	8	5 s	7	Ee	6	s 4-1	nu4	1497.33313	-7.3	0.144E+00	2118.39941	621.06555	1.0
R P	6	3 a	5	A2o	3	a 4 1	nu4	1497.51514	7.7	0.410E-01	1881.49182	383.97745	1.0
Q P	5	3 a	4	A2o	1	s 3 0	2nu2	1497.63280	-25.6	0.629E-02	1762.86198	265.22662	1.0
P P	8	4 a	7	Ee	8	a 3-1	nu4	1497.67493	17.3	0.130E+00	2152.12347	654.45027	1.0
* S Q	8	6 s	8	A2o	1	a 8-1	nu4	1497.69190	-21.5	0.192E-02	2078.47368	580.77963	1.0
* S Q	12	7 s	12	Ee	6	a 9-1	nu4	1497.78308	4.6	0.271E-03	2856.65384	1358.87122	1.0
* U Q	7	3 a	7	A2o	1	s 7 1	nu4	c1497.85674	0.0	0.130E-04	2020.08022	522.22293	0.0
* S Q	15	8 s	15	Eo	11	a10-1	nu4	n1497.93243	0.0	0.163E-04	3619.74305	2121.81062	0.0
P P	8	6 s	7	A2o	2	s 5-1	nu4	1498.81140	-1.8	0.361E+00	2079.59121	580.77963	1.0
P P	8	5 a	7	Eo	7	a 4-1	nu4	1498.84412	15.6	0.153E+00	2120.53549	621.69293	1.0
* Q P	7	1 s	6	Ee	10	a 1-1	nu4	1499.11080	25.6	0.279E-02	2049.86683	550.75859	1.0
* T Q	11	4 s	11	Eo	7	s 7 0	2nu2	1499.37601	21.4	0.478E-04	2741.48040	1242.10653	1.0
* O P	8	2 a	7	Ee	12	s 0 1	nu4	1499.58400	31.2	0.156E-02	2197.49789	697.91701	1.0
* N P	12	6 s	11	A2o	8	s 3 0	2nu2	n1499.77391	0.0	0.164E-03	2904.92768	1405.15377	0.0
P P	8	6 a	7	A2e	3	a 5-1	nu4	1499.80273	4.2	0.374E+00	2081.27306	581.47075	1.0
* M P	13	5 a	12	Eo	22	s 1-1	nu4	c1499.91837	0.0	0.106E-04	3196.85891	1696.95789	0.0
P P	8	7 s	7	Ee	2	s 6-1	nu4	1499.94360	3.9	0.236E+00	2032.83724	532.89403	1.0
* N P	10	5 s	9	Ee	11	s 2 0	2nu2	1500.19990	-3.9	0.436E-03	2494.97342	994.77313	1.0
P P	8	7 a	7	Eo	3	a 6-1	nu4	1500.51038	-14.6	0.239E+00	2034.18082	533.66898	1.0
Q P	5	2 a	4	Ee	3	s 2 0	2nu2	1500.53798	25.8	0.154E-02	1784.15206	283.61666	1.0
* S Q	9	6 a	9	A2e	1	s 8-1	nu4	1500.62140	3.4	0.242E-02	2259.62339	759.00233	1.0
P P	8	8 s	7	Eo	2	s 7-1	nu4	1500.73340	35.4	0.320E+00	1977.99395	477.26409	1.0
P P	8	8 a	7	Ee	1	a 7-1	nu4	1500.94397	-43.8	0.319E+00	1979.09701	478.14866	1.0
* Q P	7	2 s	6	Eo	9	a 2 1	nu4	c1501.21348	0.0	0.644E-04	2041.05933	539.84490	0.0
* * P	12	4 s	11	Eo	21	* * *	**	n1501.45928	0.0	0.404E-04	2977.29226	1475.83298	0.0
R P	6	2 s	5	Eo	6	s 3 1	nu4	1501.89136	-5.4	0.287E-01	1903.53973	401.64783	1.0
* S Q	13	7 a	13	Eo	8	s 9-1	nu4	1501.93730	0.2	0.122E-03	3114.59005	1612.65277	1.0
* U Q	7	3 s	7	A2e	2	a 7 1	nu4	1502.18283	40.6	0.735E-04	2023.80070	521.62193	1.0
* O P	10	3 s	9	A2e	9	a 1 1	nu4	1502.23170	-81.5	0.109E-02	2554.34625	1052.10640	1.0
Q P	5	1 a	4	Eo	3	s 1 0	2nu2	1502.35110	-29.5	0.837E-03	1796.98404	294.62999	1.0
* U Q	8	3 a	8	A2o	2	s 7 1	nu4	1502.43505	1.4	0.369E-04	2182.27162	679.83671	1.0
* M P	11	4 a	10	Ee	18	s 0 1	nu4	1502.48363	-75.6	0.926E-04	2744.99624	1242.50505	1.0
* S Q	9	6 s	9	A2o	2	a 8-1	nu4	1502.62490	-6.9	0.247E-02	2261.01085	758.38526	1.0
R P	7	0 s	6	A2o	5	s 1 1	nu4	1502.75537	61.0	0.345E+00	2057.14233	554.39306	1.0
R P	6	2 a	5	Ee	6	a 3 1	nu4	1503.42603	-11.1	0.228E-01	1905.70489	402.27775	1.0
* O P	11	6 s	10	A2o	6	a 4 1	nu4	1503.55030	-39.4	0.953E-03	2674.31508	1170.76084	1.0
P P	7	1 s	6	Ee	11	s 0 1	nu4	1504.02185	43.1	0.166E+00	2054.77613	550.75859	1.0
* O P	8	3 a	7	A2o	6	s 1 1	nu4	1504.86548	-51.1	0.222E-01	2184.70730	679.83671	1.0
* O P	16	11 s	15	Ee	13	a 9 1	nu4	n1504.95011	0.0	0.123E-04	3736.70087	2231.75076	0.0
* O P	12	7 s	11	Ee	12	a 5 1	nu4	1505.17250	-34.0	0.330E-03	2864.04712	1358.87122	1.0
* S Q	13	7 s	13	Ee	8	a 9-1	nu4	1505.31550	-4.8	0.120E-03	3117.57938	1612.26340	1.0
* O P	15	10 s	14	Eo	12	a 8 1	nu4	n1505.51824	0.0	0.328E-04	3501.07234	1995.55410	0.0
* N P	13	7 s	12	Ee	15	s 4 0	2nu2	c1505.55421	0.0	0.179E-04	3117.77546	1612.26340	0.0
* O P	8	2 s	7	Eo	13	a 0 1	nu4	c1505.59330	0.0	0.122E-02	2202.98901	697.39533	0.0
* O P	13	8 s	12	Eo	13	a 6 1	nu4	1505.78320	48.1	0.175E-03	3064.84628	1559.06789	1.0
* O P	14	9 s	13	A2e	6	a 7 1	nu4	1505.83760	130.9	0.160E-03	3277.13487	1771.31036	1.0
* S Q	10	6 a	10	A2e	2	s 8-1	nu4	1505.90280	-12.8	0.191E-02	2461.55485	955.65077	1.0
* O P	9	3 a	8	A2o	7	s 1 1	nu4	1506.56900	24.2	0.235E-02	2363.22501	856.65843	0.0
P P	7	2 s	6	Eo	10	s 1-1	nu4	1506.60767	-8.6	0.169E+00	2046.45343	539.84490	1.0
R P	6	1 s	5	Ee	7	s 2 1	nu4	1506.86157	-33.9	0.212E-01	1919.48926	412.62430	1.0
* O P	16	11 a	15	Eo	13	s 9 1	nu4	c1506.94800	0.0	0.135E-04	3739.12523	2232.16644	0.0
* O P	9	4 a	8	Ee	12	s 2 1	nu4	1507.01440	-2.3	0.270E-02	2338.47264	831.45801	1.0
* U Q	9	3 a	9	A2o	3	s 7 1	nu4	c1507.25240	0.0	0.560E-04	2363.90992	856.65843	0.0
* S P	4	1 a	3	Eo	1	s 3-1	nu4	1507.57060	2.0	0.381E-03	1703.18168	195.61128	1.0
* O P	15	10 a	14	Ee	14	s 8 1	nu4	c1507.61871	0.0	0.366E-04	3503.60181	1995.97688	0.0
R P	6	1 a	5	Eo	7	a 2 1	nu4	1507.74430	-22.2	0.120E-01	1920.98430	413.23778	1.0
* R P	4	1 s	3	Ee	1	s 2 0	2nu2	c1507.80226	0.0	0.232E-04	1702.70943	194.90631	0.0
P P	7	1 a	6	Eo	11	a 0 1	nu4	1507.82141	43.9	0.186E+00	2059.13736	551.32034	1.0
* S P	5	1 a	4	Eo	4	s 3 1	nu4	c1507.82407	0.0	0.143E-04	1802.45470	294.62999	0.0
* T Q	12	4 s	12	Eo	9	s 7 0	2nu2	c1507.91383	0.0	0.306E-04	2983.73131	1475.83298	0.0
* O P	10	5 a	9	Eo	12	s 3 1	nu4	1507.99600	1.0	0.161E-02	2503.26346	995.26756	1.0
* O P	14	9 a	13	A2o	7	s 7 1	nu4	1508.13020	-34.9	0.184E-03	3279.87606	1771.74237	1.0
* S Q	10	6 s	10	A2o	3	a 8-1	nu4	1508.21110	17.6	0.194E-02	2463.31577	955.10643	1.0
* O P	13	8 a	12	Ee	13	s 6 1	nu4	1508.46970	4.2	0.214E-03	3067.98073	1559.51145	1.0
* U Q	8	3 s	8	A2e	3	a 7 1	nu4	c1508.49931	0.0	0.166E-03	2187.78722	679.28786	0.0
* O P	11	6 a	10	A2e	7	s 4 1	nu4	1508.50110	13.4	0.181E-02	2679.73508	1171.23532	1.0

*	O P	12	7 a	11	Eo	13	s 5 1	nu4	1508.60720	14.5	0.459E-03	2867.93460	1359.32885	1.0
*	O P	9	4 s	8	Eo	12	a 2 1	nu4	1508.69560	43.8	0.207E-02	2339.63141	830.94019	1.0
	P P	7	3 s	6	A2e	4	s 2-1	nu4	1509.13794	13.1	0.363E+00	2030.75856	521.62193	1.0
*	S P	4	1 s	3	Ee	2	a 3-1	nu4	1509.33860	-43.1	0.413E-03	1704.24922	194.90631	1.0
*	S Q	14	7 a	14	Eo	10	s 9-1	nu4	c1509.35310	0.0	0.469E-04	3393.66757	1884.32138	0.0
	P P	7	2 a	6	Ee	10	a 1-1	nu4	1509.44800	28.5	0.189E+00	2049.86683	540.42168	1.0
*	N P	8	4 s	7	Eo	9	s 1 0	2nu2	c1509.52121	0.0	0.307E-03	2163.38989	653.87060	0.0
*	S P	5	1 s	4	Ee	5	a 3 1	nu4	c1510.39160	0.0	0.496E-04	1804.35963	293.96826	0.0
*	Q P	6	1 a	5	Eo	8	s 1-1	nu4	1511.18620	-10.9	0.357E-02	1924.42507	413.23778	1.0
*	* P	10	5 s	9	Ee	13	* * *	**	1511.26550	26.5	0.105E-02	2506.03598	994.77313	1.0
	P P	7	3 a	6	A2o	4	a 2-1	nu4	1511.31250	18.8	0.408E+00	2033.53355	522.22293	1.0
*	S P	5	0 s	4	A2o	3	a 2-1	nu4	1511.43970	-1.7	0.723E-02	1809.08163	297.64176	1.0
	P P	7	4 s	6	Eo	6	s 3-1	nu4	1511.59851	-1.3	0.217E+00	2007.63372	496.03508	1.0
*	S Q	11	6 a	11	A2e	3	s 8-1	nu4	1511.72300	-37.8	0.116E-02	2682.96210	1171.23532	1.0
*	M P	12	5 a	11	Eo	20	s 1-1	nu4	1511.94296	62.2	0.298E-04	2956.41333	1444.47659	1.0
*	* P	13	5 s	12	Ee	22	* * *	**	n1511.96211	0.0	0.106E-04	3208.60392	1696.64181	0.0
*	U Q	10	3 a	10	A2o	4	s 7 1	nu4	c1512.19264	0.0	0.591E-04	2564.74235	1052.54983	0.0
*	* P	11	4 s	10	Eo	19	* * *	**	c1512.21695	0.0	0.102E-03	2754.32701	1242.10653	0.0
	P P	7	4 a	6	Ee	7	a 3-1	nu4	1513.04370	15.4	0.231E+00	2009.71830	496.67614	1.0
	R P	5	3 s	4	A2e	1	s 4 1	nu4	1513.08203	-4.6	0.333E-01	1777.59911	264.51662	1.0
*	M P	10	5 a	9	Eo	13	s 1 0	2nu2	c1513.17840	0.0	0.191E-04	2508.44530	995.26756	0.0
*	S Q	14	7 s	14	Ee	10	a 9-1	nu4	c1513.53887	0.0	0.454E-04	3397.53433	1883.99402	0.0
	P P	7	5 s	6	Ee	5	s 4-1	nu4	1513.64795	-5.3	0.268E+00	1976.66152	463.01304	1.0
*	T Q	5	2 s	5	Eo	1	s 5 0	2nu2	c1514.03103	0.0	0.225E-04	1796.96739	282.93714	0.0
*	P P	5	2 s	4	Eo	3	s 1 0	2nu2	1514.04270	-42.0	0.903E-04	1796.98404	282.93714	1.0
	R P	5	3 a	4	A2o	2	a 4 1	nu4	1514.23200	14.6	0.368E-01	1779.45716	265.22662	1.0
*	S Q	7	5 a	7	Eo	2	s 7-1	nu4	1514.29000	30.6	0.135E-02	1977.99395	463.70701	1.0
*	O P	7	2 a	6	Ee	11	s 0 1	nu4	1514.36060	61.5	0.297E-02	2054.77613	540.42168	0.0
*	Q P	6	1 s	5	Ee	8	a 1-1	nu4	1514.36133	25.0	0.420E-02	1926.98313	412.62430	0.0
*	N P	9	5 s	8	Ee	9	s 2 0	2nu2	c1514.39659	0.0	0.536E-03	2312.76829	798.37451	0.0
*	S Q	11	6 s	11	A2o	4	a 8-1	nu4	1514.47690	41.4	0.115E-02	2685.23360	1170.76084	1.0
	P P	7	5 a	6	Eo	5	a 4-1	nu4	1514.60547	2.3	0.278E+00	1978.31225	463.70701	1.0
*	* P	11	6 s	10	A2o	7	* * *	**	c1514.62027	0.0	0.741E-03	2685.38002	1170.76084	0.0
*	U Q	9	3 s	9	A2e	3	a 7 1	nu4	c1514.94687	0.0	0.219E-03	2371.12655	856.17882	0.0
*	M P	10	4 a	9	Ee	16	s 0 1	nu4	c1515.28134	0.0	0.205E-03	2542.81917	1027.53549	0.0
	P P	7	6 s	6	A2o	1	s 5-1	nu4	1515.32434	2.6	0.688E+00	1937.78219	422.45811	1.0
	Q P	4	3 a	3	A2o	1	s 3 0	2nu2	1515.46875	17.6	0.177E-01	1681.55488	166.08789	1.0
	P P	7	6 a	6	A2e	2	a 5-1	nu4	1515.88196	-16.8	0.699E+00	1939.10645	423.22281	1.0
*	S Q	7	5 s	7	Ee	1	a 7-1	nu4	1516.07970	-42.7	0.140E-02	1979.09701	463.01304	1.0
	P P	7	7 s	6	Ee	1	s 6-1	nu4	1516.63086	28.3	0.459E+00	1890.87703	374.24900	1.0
*	T Q	6	2 s	6	Eo	2	s 5 0	2nu2	1516.65310	69.7	0.370E-04	1918.29396	401.64783	1.0
	P P	7	7 a	6	Eo	1	a 6-1	nu4	1516.85205	-43.7	0.457E+00	1891.96319	375.10677	1.0
*	T Q	13	4 s	13	Eo	12	s 7 0	2nu2	c1517.08768	0.0	0.159E-04	3245.15807	1728.05529	0.0
*	Q P	6	2 a	5	Ee	7	s 2 1	nu4	c1517.20772	0.0	0.176E-04	1919.48926	402.27775	0.0
*	S Q	15	7 a	15	Eo	12	s 9-1	nu4	c1517.22278	0.0	0.157E-04	3691.32463	2174.10813	0.0
*	U Q	11	3 a	11	A2o	5	s 7 1	nu4	c1517.22467	0.0	0.477E-04	2784.51339	1267.28897	0.0
*	N P	10	6 s	9	A2o	5	s 3 0	2nu2	1517.90300	7.6	0.131E-02	2473.00867	955.10643	1.0
*	S Q	12	6 a	12	A2e	4	s 8-1	nu4	1518.08148	-24.4	0.575E-03	2923.64635	1405.56243	1.0
	Q P	4	2 a	3	Ee	1	s 2 0	2nu2	1518.15564	-7.7	0.734E-02	1702.70943	184.55302	1.0
*	S Q	8	5 a	8	Eo	3	s 7-1	nu4	1518.43440	10.4	0.194E-02	2140.12629	621.69293	1.0
*	N P	12	7 s	11	Ee	13	s 4 0	2nu2	1518.64515	-129.1	0.106E-03	2877.52928	1358.87122	1.0
*	O P	16	12 s	15	A2o	5	a10 1	nu4	c1518.79622	0.0	0.314E-04	3669.04894	2150.27904	0.0
*	O P	7	2 s	6	Eo	11	a 0 1	nu4	1519.29660	41.4	0.198E-02	2059.13736	539.84490	1.0
*	Q P	6	2 s	5	Eo	7	a 2 1	nu4	1519.33530	-11.7	0.276E-03	1920.98430	401.64783	1.0
	R P	5	2 s	4	Eo	4	s 3 1	nu4	1519.51685	-7.1	0.364E-01	1802.45470	282.93714	1.0
	P P	6	1 s	5	Ee	9	s 0 1	nu4	1519.66272	41.4	0.243E+00	1932.28288	412.62430	1.0
*	O P	15	11 s	14	Ee	11	a 9 1	nu4	n1519.72159	0.0	0.405E-04	3440.68864	1920.96705	0.0
*	N P	6	3 s	5	A2e	3	s 0 0	2nu2	1519.83500	-4.9	0.134E-02	1903.15391	383.31842	1.0
	Q P	4	1 a	3	Eo	2	s 1 0	2nu2	1519.86475	-24.5	0.574E-02	1715.47848	195.61128	1.0
*	O P	11	7 s	10	Ee	10	a 5 1	nu4	1519.92000	-26.9	0.581E-03	2643.95837	1124.03568	1.0
*	N P	9	4 s	8	Eo	13	s 1-1	nu4	c1520.08248	0.0	0.124E-04	2351.02478	830.94019	0.0
*	T Q	7	2 s	7	Eo	4	s 5 0	2nu2	c1520.23736	0.0	0.343E-04	2060.08568	539.84490	0.0
*	S Q	8	5 s	8	Ee	3	a 7-1	nu4	1520.42450	-5.6	0.199E-02	2141.49061	621.06555	1.0
*	O P	14	10 s	13	Eo	10	a 8 1	nu4	c1520.43804	0.0	0.957E-04	3224.06858	1703.63799	0.0
	Q P	4	0 a	3	A2e	1	s 0 0	2nu2	1520.44946	-18.9	0.103E-01	1719.74525	199.29390	1.0
	R P	5	2 a	4	Ee	5	a 3 1	nu4	1520.74290	-0.7	0.342E-01	1804.35963	283.61666	1.0
*	O P	12	8 s	11	Eo	11	a 6 1	nu4	c1520.74702	0.0	0.381E-03	2825.87540	1305.12737	0.0
*	O P	13	9 s	12	A2e	5	a 7 1	nu4	1520.82440	25.1	0.408E-03	3019.16437	1498.34248	1.0
	R P	6	0 a	5	A2e	5	a 1 1	nu4	1521.25080	77.1	0.570E+00	1938.13083	416.88774	1.0
*	O P	16	12 a	15	A2e	6	s10 1	nu4	c1521.31880	0.0	0.356E-04	3672.10734	2150.78582	0.0
*	S Q	12	6 s	12	A2o	5	a 8-1	nu4	1521.44140	26.1	0.565E-03	2926.59256	1405.15377	1.0
*	T Q	10	3 s	10	A2e	4	s 6 0	2nu2	c1521.71732	0.0	0.208E-03	2573.82086	1052.10640	0.0
*	* P	12	5 s	11	Ee	19	* * *	**	n1521.84108	0.0	0.229E-04	2965.94632	1444.10524	0.0
*	U Q	12	3 a	12	A2o	6	s 7 1	nu4	c1522.20659	0.0	0.309E-04	3022.97191	1500.76522	0.0
*	O P	15	11 a	14	Eo	11	s 9 1	nu4	c1522.38115	0.0	0.468E-04	3443.86017	1921.47393	0.0
	P P	6	1 a	5	Eo	9	a 0 1	nu4	1522.38477	58.4	0.277E+00	1935.61671	413.23778	1.0
*	S Q	15	7 s	15	Ee	12	a 9-1	nu4	c1522.45040	0.0	0.149E-04	3696.28852	2173.83620	0.0
*	* P	12	5 s	11	Ee	20	* * *	**	n1522.68025	0.0	0.131E-04	2966.78549	1444.10524	0.0
	P P	6	2 s	5	Eo	8	s 1-1	nu4	1522.77637	-8.7	0.255E+00	1924.42507	401.64783	1.0
*	M P	13	6 a	12	A2e	11	s 2-1	nu4	c1522.85662	0.0	0.155E-04	3181.28151	1658.42705	0.0
*	N P	13	8 s	12	Eo	14	s 5 0	2nu2	c1522.92092	0.0	0.292E-04	3081.95488	1559.06789	0.0
*	S Q	9	5 a	9	Eo	5	s 7-1	nu4	1523.12630	-15.6	0.170E-02	2322.06269	798.93483	1.0
*	O P	14	10 a	13	Ee	12	s 8 1	nu4	1523.31830	-19.9	0.115E-03	3227.46757	1704.14728	1.0
*	M P	10	4 s	9	Eo	17	a 0 1	nu4	1523.71770	-82.9	0.223E-03	2550.80447	1027.07848	1.0
*	O P	13	9 a	12	A2o	6	s 7 1	nu4	1524.11295	-23.7	0.519E-03	3022.97191	1498.85659	1.0
*	O P	7	3 s	6	A2e	5	a 1 1	nu4	1524.45691	-64.5	0.151E-01	2046.08529	521.62193	1.0
*	M P	11	5 a	10	Eo	18	s 1-1	nu4	c1524.60628	0.0	0.698E-04	2735.11953	1210.51206	0.0
*	T Q	8	2 s	8	Eo	5	s 5 0	2nu2	c1524.68219	0.0	0.200E-04	2222.07896	697.39533	0.0
	P P	6	2 a	5	Ee	8	a 1-1	nu4	1524.70874	33.6	0 283E+00	1926.98313	402.27775	1.0
*	O P	12	8 a	11	Ee	11	s 6 1	nu4	1524.75950	4.7	0.543E-03	2830.40785	1305.64882	1.0
*	O P	8	4 a	7	Ee	10	s 2 1	nu4	1524.91920	-26.9	0.397E-02	2179.37216	654.45027	1.0
	R P	5	1 s	4	Ee	6	s 2 1	nu4	1524.95422	-24.9	0.409E-01	1818.92497	293.96826	1.0
*	S Q	13	6 a	13	A2e	5	s 8-1	nu4	1524.96300	12.6	0.244E-03	3183.38879	1658.42705	1.0
*	N P	7	4 s	6	Eo	7	s 1 0	2nu2	1524.97950	-27.6	0.374E-03	2021.01734	496.03508	0.0
*	O P	11	7 a	10	Eo	11	s 5 1	nu4	1525.23260	11.2	0.104E-02	2649.79863	1124.56715	1.0
*	O P	9	5 a	8	Eo	10	s 3 1	nu4	1525.39210	-37.2	0.273E-02	2324.33065	798.93483	1.0
*	S Q	9	5 s	9	Ee	5	a 7-1	nu4	c1525.42387	0.0	0.173E-02	2323.79730	798.37451	0.0
*	O P	10	6 a	9	A2e	6	s 4 1	nu4	1525.49263	-3.3	0.364E-02	2481.14373	955.65077	1.0
	P P	6	3 s	5	A2e	4	s 2-1	nu4	1525.76245	5.0	0.588E+00	1909.08037	383.31842	1.0
	R P	5	1 a	4	Eo	5	a 2 1	nu4	1525.84412	-13.4	0.290E-01	1820.47545	294.62999	1.0
*	O P	8	4 s	7	Eo	11	a 2 1	nu4	1526.76330	13.0	0.317E-02	2180.63260	653.87060	1.0
*	N P	14	9 s	13	A2e	7	s 6 0	2nu2	c1526.80830	0.0	0.157E-04	3298.09124	1771.31036	0.0
*	S P	4	0 a	3	A2e	2	s 2-1	nu4	1526.92780	6.4	0.462E-02	1726.22106	199.29390	1.0
*	O P	8	3 s	7	A2e	7	a 1 1	nu4	1526.92822	-8.6	0.395E-02	2206.21694	679.28786	0.0
	P P	6	3 a	5	A2o	4	a 2-1	nu4	1527.06152	18.1	0.625E+00	1911.03716	383.97745	1.0
*	M P	9	5 a	8	Eo	11	s 1 0	2nu2	c1527.09789	0.0	0.139E-03	2326.02586	798.93483	0.0
*	U Q	13	3 a	13	A2o	7	s 7 1	nu4	c1527.22467	0.0	0.166E-04	3279.87606	1752.64820	0.0
*	S P	4	1 s	3	Ee	3	a 3 1	nu4	c1527.94968	0.0	0.107E-04	1722.85603	194.90631	0.0
*	Q P	5	1 a	4	Eo	6	s 1-1	nu4	1528.06740	-2.0	0.409E-02	1822.69759	294.62999	1.0
*	U Q	6	2 s	6	Eo	3	a 6 1	nu4	c1528.26661	0.0	0.418E-04	1929.91176	401.64783	0.0
*	S Q	10	5 a	10	Eo	6	s 7-1	nu4	1528.37330	-33.1	0.114E-02	2523.64417	995.26756	1.0
	P P	6	4 s	5	Eo	4	a 3-1	nu4	1528.37732	-3.9	0.359E+00	1885.96189	357.58418	1.0
*	O P	9	5 s	8	Ee	11	a 3 1	nu4	1528.51140	2.7	0.210E-02	2326.88564	798.37451	1.0
*	U Q	7	2 a	7	Ee	3	s 6 1	nu4	c1528.55186	0.0	0.274E-04	2068.97237	540.42168	0.0
*	M P	9	4 a	8	Ee	14	s 0 1	nu4	1528.79240	-1.8	0.376E-03	2360.25059	831.45801	1.0
*	T Q	11	3 s	11	A2e	5	s 6 0	2nu2	1528.94450	17.1	0.152E-03	2795.88014	1266.93735	1.0
*	S Q	13	6 s	13	A2o	6	a 8-1	nu4	1529.12250	9.9	0.236E-03	3187.20076	1658.07925	1.0
	P P	6	4 a	5	Ee	5	a 3-1	nu4	1529.28967	0.7	0.374E+00	1887.57409	358.28449	1.0
*	N P	8	5 s	7	Ee	7	s 2 0	2nu2	c1529.31501	0.0	0.632E-03	2150.37824	621.06555	0.0
*	O P	6	2 a	5	Ee	9	s 0 1	nu4	1530.00950	43.7	0.443E-02	1932.28288	402.27775	1.0
*	* P	10	6 s	9	A2o	6	* * *	**	1530.47480	3.6	0.212E-02	2485.58087	955.10643	1.0
	P P	6	5 s	5	Ee	3	a 4-1	nu4	1530.61414	1.1	0.458E+00	1854.98294	324.36891	1.0
*	Q P	5	1 s	4	Ee	7	a 1-1	nu4	1530.65250	19.8	0.470E-02	1824.61878	293.96826	1.0
*	S Q	10	5 s	10	Ee	7	a 7-1	nu4	1531.11610	47.0	0.114E-02	2525.88453	994.77313	0.0
	P P	6	5 a	5	Eo	3	a 4-1	nu4	1531.15906	-17.9	0.466E+00	1856.28804	325.12719	1.0
*	- P	12	6 a	11	A2e	9	s 0 0	2nu2	c1531.35528	0.0	0.117E-04	2936.91815	1405.56243	0.0
*	P P	4	2 s	3	Eo	2	s 1 0	2nu2	c1531.64732	0.0	0.525E-04	1715.47848	183.82908	0.0
*	M P	13	6 s	12	A2o	10	a 2-1	nu4	n1531.71418	0.0	0.233E-04	3189.79343	1658.07925	0.0
*	O P	16	13 s	15	Eo	8	a11 1	nu4	c1531.87692	0.0	0.199E-04	3592.68167	2060.75564	0.0
*	S Q	14	6 a	14	A2e	6	s 8-1	nu4	c1532.33874	0.0	0.901E-04	3461.94911	1929.61381	0.0
	P P	6	4 s	5	A2o	1	s 5-1	nu4	1532.45032	19.5	0.121E+01	1816.02272	283.57435	1.0
*	S Q	6	4 a	6	Ee	1	s 6-1	nu4	1532.59500	24.6	0.179E-02	1890.87703	358.28449	1.0
*	N P	9	6 s	8	A2o	4	s 3 0	2nu2	1532.60413	6.8	0.167E-02	2290.98871	758.38526	1.0
*	U Q	8	2 a	8	Ee	5	s 6 1	nu4	c1532.61387	0.0	0.472E-04	2230.52999	697.91701	0.0
	P P	6	6 a	5	A2e	1	a 5-1	nu4	1532.68298	-42.1	0.121E+01	1817.09732	284.41013	1.0
*	* P	11	7 s	10	Ee	11	* * *	**	c1533.09353	0.0	0.413E-03	2657.12980	1124.03568	0.0
*	O P	15	12 s	14	A2o	4	a10 1	nu4	1533.28856	37.7	0.990E-04	3371.74052	1838.45573	1.0
*	M P	11	5 s	10	Ee	17	a 1-1	nu4	1533.37040	-8.7	0.848E-04	2743.45226	1210.08099	1.0
*	U Q	7	2 s	7	Eo	5	a 6 1	nu4	1533.37040	24.6	0.117E-03	2073.21284	539.84490	1.0
	R P	5	0 s	4	A2o	4	s 1 1	nu4	1533.79675	63.4	0.682E+00	1831.43217	297.64176	1.0
*	O P	6	2 s	5	Eo	9	a 0 1	nu4	1533.97380	49.2	0.280E-02	1935.61671	401.64783	1.0
*	M P	12	6 a	11	A2e	10	s 2-1	nu4	c1534.12547	0.0	0.368E-04	2939.69214	1405.56243	0.0
*	S Q	11	5 a	11	Eo	8	s 7-1	nu4	1534.17740	-31.5	0.627E-03	2744.69261	1210.51206	1.0
*	S Q	6	4 a	6	Eo	1	a 6-1	nu4	1534.37500	-40.1	0.186E-02	1891.96319	357.58418	1.0
*	O P	14	11 s	13	Ee	9	a 9 1	nu4	c1534.41901	0.0	0.114E-03	3162.57624	1628.15646	0.0
*	N P	10	7 s	9	Ee	8	s 4 0	2nu2	1534.68680	0.8	0.866E-03	2442.65175	907.96503	1.0
*	N P	8	4 s	7	Eo	12	s 1-1	nu4	c1534.82769	0.0	0.208E-04	2188.69945	653.87060	0.0
*	O P	7	3 a	6	A2o	5	s 1 1	nu4	1534.92582	64.2	0.699E-02	2057.14233	522.22293	1.0
*	O P	16	13 a	15	Eo	10	a11 1	nu4	c1535.03167	0.0	0.234E-04	3596.41349	2061.38411	0.0
*	O P	13	10 s	12	Eo	8	a 8 1	nu4	1535.27129	-20.4	0.237E-03	2965.18390	1429.91057	1.0
*	Q P	5	2 a	4	Eo	6	s 2 1	nu4	c1535.30576	0.0	0.379E-04	1818.92497	283.61666	0.0
*	O P	11	8 s	10	Eo	9	a 6 1	nu4	1535.63780	-18.1	0.687E-03	2605.41109	1069.77148	1.0
*	O P	12	9 s	11	A2e	4	a 7 1	nu4	1535.73830	-29.5	0.874E-03	2779.50839	1243.76714	1.0
*	M P	9	4 s	8	Eo	15	a 0 1	nu4	1536.00660	-46.0	0.417E-03	2366.95139	830.94019	1.0
*	N P	12	8 s	11	Eo	12	s 5 0	2nu2	c1536.05950	0.0	0.141E-03	2841.19156	1305.12737	0.0
*	S Q	7	4 a	7	Ee	2	a 6-1	nu4	1536.16120	1.0	0.285E-02	2032.83724	496.67614	1.0
	P P	5	1 s	4	Ee	8	s 0 1	nu4	1536.20874	27.8	0.308E+00	1830.17422	293.96826	1.0
	Q P	3	2 a	2	Ee	1	s 2 0	2nu2	1536.46106	28.9	0.138E-01	1641.64191	105.18374	1.0
*	O P	15	12 a	14	A2e	5	s10 1	nu4	c1536.47899	0.0	0.120E-03	3375.55332	1839.07397	0.0
*	U Q	9	2 a	9	Ee	7	s 6 1	nu4	c1536.83321	0.0	0.562E-04	2411.44913	874.61644	0.0
*	T Q	12	3 s	12	A2e	6	s 6 0	2nu2	1536.92399	37.9	0.884E-04	3037.32425	1500.40405	1.0
	R P	4	2 s	3	Eo	3	s 3 1	nu4	1537.47034	-10.0	0.276E-01	1721.30042	183.82908	1.0
*	S Q	11	5 s	11	Ee	9	a 7-1	nu4	1537.52310	18.1	0.618E-03	2747.60228	1210.08099	1.0
*	S Q	14	6 s	14	A2o	7	a 8-1	nu4	c1537.52543	0.0	0.853E-04	3466.84332	1929.32140	0.0
*	Q P	5	2 s	4	Eo	5	a 2 1	nu4	c1537.53732	0.0	0.502E-03	1820.47545	282.93714	0.0
*	O P	14	11 a	13	Eo	9	s 9 1	nu4	1537.81566	-25.9	0.143E-03	3166.58558	1628.76733	1.0
*	M P	10	5 a	9	Eo	16	s 1-1	nu4	c1537.96999	0.0	0.135E-03	2533.24023	995.26756	0.0
	P P	5	1 a	4	Eo	7	a 0 1	nu4	1538.01025	50.6	0.354E+00	1832.63518	294.62999	1.0
	Q P	3	1 a	2	Eo	1	s 1 0	2nu2	1538.07446	2.6	0.148E-01	1654.35247	116.27827	1.0
*	S Q	7	4 s	7	Eo	3	a 6-1	nu4	1538.14470	-10.4	0.294E-02	2034.18082	496.03508	1.0
	R P	4	2 a	3	Ee	3	a 3 1	nu4	1538.30130	-17.1	0.290E-01	1722.85603	184.55302	1.0
*	T Q	4	1 s	4	Ee	1	s 4 0	2nu2	c1538.42899	0.0	0.234E-04	1733.33458	194.90631	0.0
*	U Q	8	2 s	8	Eo	6	a 6 1	nu4	c1538.64234	0.0	0.183E-03	2236.03878	697.39533	0.0
*	N P	13	9 s	12	A2e	6	s 6 0	2nu2	c1538.98584	0.0	0.913E-04	3037.32425	1498.34248	0.0
*	O P	13	10 a	12	Ee	10	s 8 1	nu4	1539.03960	-15.7	0.316E-03	2969.55808	1430.51691	1.0
	P P	5	2 s	4	Eo	6	s 1-1	nu4	1539.75964	-8.1	0.346E+00	1822.69759	282.93714	1.0
	Q Q	15	15 a	15	A2o	1	s15 0	2nu2	1539.77065	-11.8	0.160E-02	3081.63898	1541.86715	1.0
*	O P	12	9 a	11	A2o	5	s 7 1	nu4	1540.14100	-6.1	0.129E-02	2784.51339	1244.37178	1.0
*	S Q	15	6 a	15	A2e	7	s 8-1	nu4	n1540.16645	0.0	0.294E-04	3759.06493	2218.89848	0.0
*	S Q	8	4 a	8	Ee	4	s 6-1	nu4	1540.28150	-7.4	0.278E-02	2194.73251	654.45027	1.0
*	S Q	12	5 a	12	Eo	10	s 7-1	nu4	1540.53180	0.2	0.295E-03	2985.00837	1444.47659	1.0
*	T Q	5	1 s	5	Ee	1	s 4 0	2nu2	1540.77551	-31.8	0.542E-04	1834.74695	293.96826	1.0
	P P	5	2 a	4	Ee	7	a 1-1	nu4	1541.00415	20.3	0.378E+00	1824.61878	283.61666	1.0
*	O P	11	8 a	10	Ee	9	s 6 1	nu4	1541.11110	6.4	0.121E-02	2611.48776	1070.37730	1.0
*	U Q	10	2 a	10	Ee	9	s 6 1	nu4	c1541.13079	0.0	0.508E-04	2611.48776	1070.35781	0.0
*	N P	6	4 s	5	Eo	5	s 1 0	2nu2	c1541.26129	0.0	0.370E-03	1898.84702	357.58418	0.0
*	N P	14	10 s	13	Eo	12	s 7 0	2nu2	c1541.50498	0.0	0.137E-04	3245.15807	1703.63799	0.0
*	O P	6	3 a	5	A2o	5	s 1 1	nu4	1541.60339	-63.9	0.184E-01	1925.58723	383.97745	1.0
*	M P	8	5 a	7	Eo	9	s 1 0	2nu2	1541.69863	16.7	0.124E-03	2163.38989	621.69293	1.0
*	O P	10	7 a	9	Eo	9	s 5 1	nu4	1541.93400	3.4	0.209E-02	2450.50862	908.57496	1.0
*	S Q	8	4 s	8	Eo	4	a 6-1	nu4	c1542.57168	0.0	0.283E-02	2196.44145	653.87060	0.0
*	O P	9	6 a	8	A2e	5	s 4 1	nu4	1542.58470	-16.7	0.651E-02	2301.58870	759.00233	1.0
	P P	5	3 s	4	A2e	2	s 2-1	nu4	1542.97986	-0.4	0.851E+00	1807.49652	264.51662	1.0
*	O P	7	4 a	6	Ee	9	s 2 1	nu4	1542.99600	-41.9	0.539E-02	2039.67633	496.67614	1.0
*	O P	8	5 a	7	Eo	10	s 3 1	nu4	1543.04790	3.1	0.440E-02	2164.74052	621.69293	0.0
*	M P	8	4 a	7	Ee	12	s 0 1	nu4	1543.04920	15.8	0.559E-03	2197.49789	654.45027	0.0
	R P	4	1 s	3	Ee	4	s 2 1	nu4	1543.22412	-13.5	0.563E-01	1738.13178	194.90631	1.0
*	M P	12	6 s	11	A2o	10	a 2-1	nu4	c1543.46969	0.0	0.579E-04	2948.60757	1405.15377	0.0
	P P	5	3 a	4	A2o	3	a 2-1	nu4	1543.85498	-0.3	0.897E+00	1809.08163	265.22662	1.0
*	T Q	6	1 s	6	Ee	3	s 4 0	2nu2	c1543.90989	0.0	0.694E-04	1956.53845	412.62430	0.0
	R P	4	1 a	3	Eo	4	a 2 1	nu4	1544.01904	-4.4	0.487E-01	1739.63076	195.61128	1.0
*	L P	11	6 a	10	A2e	8	a 1 1	nu4	c1544.06907	0.0	0.601E-04	2715.30247	1171.23532	0.0
*	* Q	9	2 s	9	Eo	8	* * *	**	1544.15533	-15.7	0.202E-03	2418.30719	874.15029	1.0
*	O P	16	14 s	15	Eo	7	a12 1	nu4	n1544.45121	0.0	0.265E-04	3507.35017	1962.89896	0.0
*	S Q	12	5 s	12	Ee	11	a 7-1	nu4	1544.67480	25.2	0.285E-03	2988.77752	1444.10524	1.0
*	S Q	9	4 a	9	Ee	6	s 6-1	nu4	1544.96650	-18.9	0.207E-02	2376.42640	831.45801	1.0
*	O P	7	4 s	6	Eo	9	a 2 1	nu4	1545.02470	4.5	0.440E-02	2041.05933	496.03508	1.0
*	N P	7	5 s	6	Ee	6	s 2 0	2nu2	c1545.04322	0.0	0.649E-03	2008.05676	463.01304	0.0
*	M P	10	5 s	9	Ee	15	a 1-1	nu4	c1545.41991	0.0	0.172E-03	2540.19851	994.77313	0.0
*	U Q	11	2 a	11	Ee	11	s 6 1	nu4	c1545.44351	0.0	0.367E-04	2830.40785	1284.96524	0.0
*	T Q	13	3 s	13	A2e	7	s 6 0	2nu2	c1545.68566	0.0	0.427E-04	3298.09124	1752.43300	0.0
*	Q P	4	1 a	3	Eo	5	s 1-1	nu4	1545.69750	-14.5	0.316E-02	1741.31023	195.61128	1.0
	P P	5	4 s	4	Eo	2	s 3-1	nu4	1545.80432	-1.2	0.548E+00	1784.45704	238.65260	1.0
*	O P	8	5 s	7	Ee	9	a 3 1	nu4	1546.02780	-13.0	0.356E-02	2167.09465	621.06555	1.0
*	O P	15	13 s	14	Ee	6	a11 1	nu4	c1546.26923	0.0	0.582E-04	3294.04406	1747.76485	0.0
	P P	5	4 a	4	Ee	4	a 3-1	nu4	1546.33142	-18.4	0.559E+00	1785.74149	239.40823	1.0

*	O P	5	2 a	4	Ee	8	s 0 1	nu4	1546.56000	24.4	0.519E-02	1830.17422	283.61666	1.0
*	S Q	15	6 s	15	A2o	8	a 8-1	nu4	n1546.62504	0.0	0.272E-04	3765.28051	2218.65547	0.0
	Q Q	14	14 a	14	Ee	1	s14 0	2nu2	1546.81450	-336.0	0.172E-02	2900.39056	1353.54246	1.0
*	S P	3	0 s	2	A2o	1	a 2-1	nu4	1547.05410	-53.2	0.205E-02	1666.29726	119.23784	0.0
*	O P	9	6 s	8	A2o	5	a 4 1	nu4	1547.05910	-6.0	0.449E-02	2305.44496	758.38526	0.0
*	S Q	13	5 a	13	Eo	11	s 7-1	nu4	1547.41080	8.1	0.121E-03	3244.36788	1696.95789	1.0
	R Q	15	14 a	15	Ee	2	a15 1	nu4	n1547.50322	0.0	0.457E-04	3197.07244	1649.56922	0.0
*	S Q	9	4 s	9	Eo	6	a 6-1	nu4	1547.69830	24.4	0.208E-02	2378.63605	830.94019	1.0
*	T Q	7	1 s	7	Ee	4	s 4 0	2nu2	1547.83090	-7.3	0.600E-04	2098.59022	550.75859	1.0
*	O P	14	12 s	13	A2o	3	a10 1	nu4	1547.86700	-67.7	0.260E-03	3092.50946	1544.63569	1.0
*	Q P	4	1 s	3	Ee	5	a 1-1	nu4	1547.89680	7.9	0.370E-02	1742.80232	194.90631	1.0
*	N P	8	6 s	7	A2o	3	s 3 0	2nu2	1547.95040	2.1	0.187E-02	2128.72982	580.77963	1.0
*	O P	16	14 a	15	Ee	7	s12 1	nu4	c1548.06342	0.0	0.301E-04	3511.74926	1963.69197	0.0
	P P	5	5 s	4	Ee	2	s 4-1	nu4	1548.18396	10.3	0.726E+00	1753.45203	205.26910	1.0
	P P	5	5 a	4	Eo	1	a 4-1	nu4	1548.42896	-40.1	0.723E+00	1754.52040	206.08743	1.0
*	* P	10	7 s	9	Ee	9	* * *	**	1548.45780	31.1	0.114E-02	2456.41972	907.96503	0.0
*	M P	8	4 s	7	Eo	13	a 0 1	nu4	1549.11826	-1.5	0.651E-03	2202.98901	653.87060	1.0
*	O P	13	11 s	12	Ee	7	a 9 1	nu4	1549.21480	-42.0	0.266E-03	2902.78534	1353.56634	1.0
*	O P	5	2 s	4	Eo	7	a 0 1	nu4	1549.70300	49.6	0.331E-02	1832.63518	282.93714	1.0
*	U Q	12	2 a	12	Ee	13	s 6 1	nu4	c1549.73072	0.0	0.218E-04	3067.98073	1518.25026	0.0
*	N P	9	7 s	8	Ee	6	s 4 0	2nu2	1549.86410	0.0	0.110E-02	2260.72040	710.85630	1.0
*	O P	15	13 a	14	Eo	8	s11 1	nu4	c1549.88791	0.0	0.750E-04	3298.42397	1748.53216	0.0
*	P P	3	2 s	2	Eo	1	s 1 0	2nu2	c1549.93113	0.0	0.180E-04	1654.35247	104.42207	0.0
*	* Q	10	2 s	10	Eo	10	* * *	**	1550.05730	22.1	0.171E-03	2620.00139	1069.94630	1.0
*	S Q	10	4 a	10	Ee	8	s 6-1	nu4	1550.22660	-5.7	0.127E-02	2577.76266	1027.53549	1.0
*	* P	11	8 s	10	Eo	10	* * *	**	1550.23210	21.9	0.484E-03	2620.00139	1069.77148	1.0
*	O P	12	10 s	11	Eo	6	a 8 1	nu4	1550.24010	-23.2	0.485E-03	2724.85048	1174.60806	0.0
*	N P	7	4 s	6	Eo	10	s 1-1	nu4	c1550.41718	0.0	0.310E-04	2046.45343	496.03508	0.0
*	* P	11	6 a	10	A2e	9	* * *	**	c1550.46467	0.0	0.417E-04	2721.71254	1171.23532	0.0
*	N P	10	8 s	9	Eo	7	s 5 0	2nu2	c1550.76994	0.0	0.103E-02	2403.98157	853.21120	0.0
*	S Q	5	3 a	5	A2o	1	s 5-1	nu4	1550.79740	13.0	0.430E-02	1816.02272	265.22662	1.0
*	O P	11	9 s	10	A2e	3	a 7 1	nu4	1550.80802	-138.9	0.155E-02	2558.63033	1007.80842	0.0
	R Q	15	14 s	15	Eo	2	s15 1	nu4	1551.61694	91.6	0.527E-03	3200.20763	1648.59985	0.0
*	O P	14	12 a	13	A2e	4	s10 1	nu4	1551.63020	-0.6	0.347E-03	3097.01158	1545.38132	1.0
*	M P	9	5 a	8	Eo	13	s 1-1	nu4	c1552.08784	0.0	0.209E-03	2351.02478	798.93483	0.0
*	N P	12	9 s	11	A2e	5	s 6 0	2nu2	c1552.11460	0.0	0.375E-03	2795.88014	1243.76714	0.0
	R P	4	0 a	3	A2e	3	a 1 1	nu4	1552.15735	66.5	0.835E+00	1751.44460	199.29390	1.0
*	T Q	8	1 s	8	Ee	6	s 4 0	2nu2	1552.48203	1.1	0.350E-04	2260.72040	708.23848	1.0
*	S Q	5	3 s	5	A2e	1	a 5-1	nu4	1552.57700	-37.0	0.451E-02	1817.09732	264.51662	1.0
*	S Q	13	5 s	13	Ee	13	a 7-1	nu4	c1552.59816	0.0	0.114E-03	3249.21143	1696.64181	0.0
*	N P	7	4 a	6	Ee	10	a 1-1	nu4	c1553.19328	0.0	0.136E-04	2049.86683	496.67614	0.0
*	O P	13	11 a	12	Eo	7	s 9 1	nu4	1553.26760	-16.1	0.374E-03	2907.56331	1354.29410	1.0
*	S Q	10	4 s	10	Eo	7	a 6-1	nu4	1553.55800	13.4	0.125E-02	2580.63514	1027.07848	1.0
	Q Q	13	13 a	13	Eo	1	s13 0	2nu2	1553.55959	-118.4	0.350E-02	2730.82459	1177.25316	0.0
*	Q P	4	2 a	3	Ee	4	s 2 1	nu4	c1553.57734	0.0	0.229E-04	1738.13178	184.55302	0.0
	P P	4	1 s	3	Ee	6	s 0 1	nu4	1553.62939	10.3	0.340E+00	1748.53467	194.90631	1.0
*	S Q	6	3 a	6	A2o	1	s 5-1	nu4	1553.80466	-0.8	0.763E-02	1937.78219	383.97745	1.0
*	N P	13	10 s	12	Eo	9	s 7 0	2nu2	c1553.83624	0.0	0.685E-04	2983.73131	1429.91057	0.0
*	U Q	13	2 a	13	Ee	15	s 6 1	nu4	c1553.97268	0.0	0.109E-04	3323.98900	1770.01299	0.0
	R Q	14	13 a	14	Eo	1	a14 1	nu4	c1554.09013	0.0	0.127E-03	3007.78466	1453.73603	0.0
*	N P	4	3 s	3	A2e	1	s 0 0	2nu2	1554.42029	61.2	0.313E-03	1719.74525	165.33108	0.0
*	U Q	5	1 s	5	Ee	2	a 5 1	nu4	c1554.50105	0.0	0.412E-04	1848.46695	293.96826	0.0
*	M P	11	6 s	10	A2o	8	a 2-1	nu4	c1554.63057	0.0	0.137E-03	2725.39127	1170.76084	0.0
*	U Q	6	1 a	6	Eo	4	s 5 1	nu4	c1554.64873	0.0	0.366E-04	1967.88595	413.23778	0.0
	P P	4	1 a	3	Eo	6	a 0 1	nu4	1554.73401	26.3	0.384E+00	1750.34266	195.61128	1.0
*	S Q	14	5 a	14	Eo	13	s 7-1	nu4	c1554.78035	0.0	0.438E-04	3522.52226	1967.74247	0.0
*	O P	12	10 a	11	Ee	7	s 8 1	nu4	1554.80660	20.8	0.746E-03	2730.12612	1175.32160	1.0
*	O P	6	3 s	5	A2e	5	a 1 1	nu4	1554.81970	72.9	0.814E-02	1938.13083	383.31842	1.0
*	M P	12	7 a	11	Eo	15	s 3-1	nu4	c1555.07230	0.0	0.179E-04	2914.40214	1359.32885	0.0
*	N P	14	11 s	13	Ee	10	s 8 0	2nu2	c1555.12174	0.0	0.225E-04	3183.26853	1628.15646	0.0
*	T Q	14	3 s	14	A2e	8	s 6 0	2nu2	c1555.31389	0.0	0.175E-04	3577.92774	2022.61025	0.0
*	S Q	6	3 s	6	A2e	2	a 5-1	nu4	1555.78672	-13.1	0.793E-02	1939.10645	383.31842	1.0
*	Q P	4	2 s	3	Eo	4	a 2 1	nu4	c1555.80121	0.0	0.287E-03	1739.63076	183.82908	0.0
*	S Q	11	4 a	11	Ee	10	s 6-1	nu4	1556.05620	-8.2	0.662E-03	2798.56207	1242.50505	1.0
*	O P	11	9 a	10	A2o	4	s 7 1	nu4	1556.23070	-3.9	0.275E-02	2564.74235	1008.51126	1.0
*	T Q	11	2 s	11	Eo	12	s 5 0	2nu2	c1556.58054	0.0	0.114E-03	2841.19156	1284.60633	0.0
*	O P	16	15 a	15	A2e	3	a13 1	nu4	n1556.58736	0.0	0.510E-04	3412.97167	1856.38431	0.0
	Q P	2	1 a	1	Eo	1	a 1 0	2nu2	1556.90332	36.9	0.203E-01	1613.60884	56.70921	1.0
*	S Q	7	3 a	7	A2o	2	s 5-1	nu4	1557.36993	16.5	0.829E-02	2079.59121	522.22293	1.0
	Q P	2	0 a	1	A2e	1	s 0 0	2nu2	1557.43567	34.2	0.479E-01	1617.84526	60.41301	1.0
	P P	4	2 s	3	Eo	5	s 1-1	nu4	1557.47900	-21.5	0.429E+00	1741.31023	183.82908	1.0
*	O P	10	8 a	9	Ee	7	s 6 1	nu4	1557.54360	12.3	0.233E-02	2411.44913	853.90676	1.0
*	T Q	9	1 s	9	Ee	8	s 4 0	2nu2	c1557.73652	0.0	0.109E-04	2442.65175	884.91558	0.0
	R Q	14	13 s	14	Ee	2	s14 1	nu4	1557.97143	-87.2	0.127E-02	3010.78978	1452.80963	1.0
*	U Q	7	1 a	7	Eo	6	s 5 1	nu4	c1558.00689	0.0	0.728E-04	2109.32675	551.32034	0.0
*	M P	7	4 a	6	Ee	11	s 0 1	nu4	1558.10740	74.1	0.646E-03	2054.77613	496.67614	1.0
	P P	4	2 a	3	Ee	5	a 1-1	nu4	1558.24939	0.9	0.454E+00	1742.80232	184.55302	1.0
*	M P	9	5 s	8	Ee	13	a 1-1	nu4	c1558.30081	0.0	0.283E-03	2356.67909	798.37451	0.0
*	N P	5	4 s	4	Eo	3	s 1 0	2nu2	c1558.32825	0.0	0.271E-03	1796.98404	238.65260	0.0
*	U Q	6	1 s	6	Ee	4	a 5 1	nu4	c1558.47746	0.0	0.143E-03	1971.10083	412.62430	0.0
*	O P	9	7 a	8	Eo	7	s 5 1	nu4	1558.72870	-3.2	0.359E-02	2270.27698	711.54796	1.0
*	O P	15	14 s	14	Eo	5	a12 1	nu4	c1558.84698	0.0	0.623E-04	3207.45710	1648.59985	0.0
	Q P	15	9 s	14	A2e	9	a 9 0	2nu2	n1559.38479	0.0	0.158E-04	3621.82296	2062.43817	0.0
	Q P	15	6 s	14	A2o	14	a 6 0	2nu2	n1559.58825	0.0	0.124E-04	3778.24372	2218.65547	0.0
*	S Q	7	3 s	7	A2e	3	a 5-1	nu4	1559.65244	13.1	0.852E-02	2081.27306	521.62193	1.0
*	O P	8	6 a	7	A2e	4	s 4 1	nu4	1559.77370	-11.0	0.999E-02	2141.24555	581.47075	1.0
	Q Q	12	12 a	12	Ee	1	s12 0	2nu2	1559.89927	-35.5	0.134E-01	2572.95742	1013.05460	1.0
*	S Q	11	4 s	11	Eo	9	a 6-1	nu4	1560.15640	-61.6	0.641E-03	2802.26909	1242.10653	0.0
	R Q	13	12 a	13	A2e	1	a13 1	nu4	c1560.34753	0.0	0.613E-03	2830.27467	1269.95997	0.0
*	O P	16	15 a	15	A2o	3	s13 1	nu4	1560.36749	-11.0	0.717E-04	3417.77150	1857.40291	0.0
	Q P	15	10 a	14	Eo	15	a10 0	2nu2	n1560.60675	0.0	0.114E-04	3556.16085	1995.55410	0.0
*	O P	7	5 s	6	Eo	8	s 3 1	nu4	1560.65010	-8.5	0.616E-02	2024.35796	463.70701	1.0
	P P	4	3 s	3	A2e	2	s 2-1	nu4	1560.88953	-4.5	0.115E+01	1726.22106	165.33108	1.0
	R Q	15	13 a	15	Eo	3	a14 1	nu4	1560.90487	66.4	0.143E-03	3309.43039	1748.53216	1.0
*	O P	14	13 s	13	Ee	4	a11 1	nu4	1560.93645	-17.7	0.136E-03	3013.74785	1452.80963	1.0
*	M P	10	6 a	9	A2e	8	s 2-1	nu4	c1561.08710	0.0	0.163E-03	2516.73023	955.65077	0.0
	Q Q	15	14 a	15	Ee	3	s14 0	2nu2	1561.12155	1.3	0.865E-03	3210.69064	1649.56922	1.0
*	S Q	14	5 s	14	Ee	15	a 7-1	nu4	n1561.19988	0.0	0.404E-04	3528.67653	1967.47665	0.0
*	O P	6	4 a	5	Ee	7	s 2 1	nu4	1561.20100	-37.7	0.644E-02	1919.48926	358.28449	1.0
	P P	4	3 a	3	A2o	2	a 2-1	nu4	1561.38354	-16.8	0.117E+01	1727.47311	166.08789	1.0
*	S Q	8	3 a	8	A2o	3	s 5-1	nu4	1561.49840	-17.5	0.689E-02	2241.33686	679.83671	1.0
*	U Q	8	1 a	8	Eo	7	s 5 1	nu4	c1561.53067	0.0	0.988E-04	2270.27698	708.74660	0.0
*	N P	6	5 s	5	Ee	4	s 2 0	2nu2	c1561.58010	0.0	0.519E-03	1885.95123	324.36891	0.0
	R P	3	1 s	2	Ee	2	s 2 1	nu4	1561.76099	-11.5	0.448E-01	1677.29875	115.53661	1.0
*	O P	5	3 s	4	A2e	3	a 1 1	nu4	1562.09900	-59.8	0.135E-01	1826.62160	264.51662	1.0
	Q P	15	11 s	14	Ee	13	a11 0	2nu2	n1562.29580	0.0	0.148E-04	3483.26285	1920.96705	0.0
*	T Q	3	0 s	3	A2o	1	s 3 0	2nu2	c1562.31897	0.0	0.747E-04	1681.55488	119.23784	0.0
	R P	3	1 a	2	Eo	2	a 2 1	nu4	1562.36011	-1.1	0.444E-01	1678.63849	116.27827	1.0

*	S Q	12	4 a	12	Ee	12	s 6-1	nu4	1562.44310	3.6	0.303E-03	3038.61908	1476.17634	1.0
*	M P	12	7 s	11	Ee	16	a 3-1	nu4	c1562.52839	0.0	0.230E-04	2921.41309	1358.87122	0.0
*	S Q	15	5 a	15	Eo	15	s 7-1	nu4	n1562.58957	0.0	0.142E-04	3819.19740	2256.60783	0.0
*	O P	15	14 a	14	Ee	5	s12 1	nu4	1562.60018	8.8	0.865E-04	3212.16852	1649.56922	0.0
*	U Q	7	1 s	7	Ee	5	a 5 1	nu4	c1562.63694	0.0	0.267E-03	2113.39577	550.75859	0.0
*	O P	13	12 s	12	A2o	2	a10 1	nu4	1562.79190	-42.8	0.547E-03	2831.86702	1269.07084	1.0
*	M P	7	4 s	6	Eo	11	a 0 1	nu4	1563.10623	39.5	0.811E-03	2059.13736	496.03508	1.0
*	O P	6	4 s	5	Eo	7	a 2 1	nu4	1563.39820	-19.2	0.538E-02	1920.98430	357.58418	1.0
*	O P	7	5 s	6	Ee	8	a 3 1	nu4	1563.65430	+27.3	0.511E-02	2026.67007	463.01304	1.0
	P P	4	4 s	3	Eo	1	s 3-1	nu4	1563.82385	1.8	0.779E+00	1703.18168	139.35801	1.0
*	O P	8	6 s	7	A2o	4	a 4 1	nu4	1563.87090	-2.7	0.765E-02	2144.65080	580.77963	1.0
*	O P	4	2 a	3	Ee	6	s 0 1	nu4	1563.98350	18.5	0.462E-02	1748.53467	184.55302	1.0
*	Q P	3	1 a	2	Eo	3	s 1-1	nu4	1563.99570	-6.4	0.146E-02	1680.27461	116.27827	1.0
*	T Q	12	2 s	12	Eo	14	s 5 0	2nu2	c1564.04783	0.0	0.616E-04	3081.95488	1517.94098	0.0
*	N P	7	6 s	6	A2o	2	s 3 0	2nu2	1564.06710	-11.1	0.168E-02	1986.52632	422.45811	1.0
	P P	4	4 a	3	Ee	2	a 3-1	nu4	1564.08240	-36.0	0.776E+00	1704.24922	140.16322	1.0
	R Q	13	12 s	13	A2o	1	s13 1	nu4	1564.15930	-40.1	0.572E-02	2833.23415	1269.07084	1.0
*	S Q	8	3 s	8	A2e	4	a 5-1	nu4	1564.22750	23.3	0.698E-02	2243.51303	679.28786	1.0
*	O P	9	7 s	8	Ee	7	a 5 1	nu4	1564.33740	-8.1	0.235E-02	2275.19451	710.85630	1.0
*	L P	10	6 s	9	A2o	7	s 1 1	nu4	c1564.34155	0.0	0.104E-03	2519.44370	955.10643	0.0
*	O P	12	11 s	11	Ee	5	a 9 1	nu4	1564.37890	-20.3	0.494E-03	2661.81799	1097.43706	1.0
*	O P	14	13 a	13	Eo	6	s11 1	nu4	c1564.74704	0.0	0.195E-03	3018.48140	1453.73603	0.0
	Q P	15	12 s	14	A2o	6	a12 0	2nu2	n1565.05314	0.0	0.404E-04	3403.50887	1838.45573	0.0
*	* P	10	8 s	9	Eo	8	* * *	**	1565.09440	-15.9	0.122E-02	2418.30719	853.21120	1.0
*	U Q	9	1 a	9	Eo	9	s 5 1	nu4	c1565.13937	0.0	0.101E-03	2450.50862	885.36964	0.0
*	O P	11	10 s	10	Eo	4	a 8 1	nu4	1565.60750	-11.4	0.790E-03	2503.56687	937.95823	1.0
*	N P	8	7 s	7	Ee	4	s 4 0	2nu2	1565.69458	-16.1	0.112E-02	2098.59022	532.89403	1.0
	Q Q	11	11 a	11	Eo	1	s11 0	2nu2	1565.80831	2.9	0.120E-01	2426.80659	860.99857	1.0
*	Q P	3	1 s	2	Ee	3	a 1-1	nu4	1565.96430	-19.0	0.194E-02	1681.50281	115.53661	1.0
*	N P	11	9 s	10	A2e	4	s 6 0	2nu2	1566.01828	58.4	0.113E-02	2573.82086	1007.80842	1.0
*	O P	5	3 a	4	A2o	4	s 1 1	nu4	1566.21210	65.5	0.104E-01	1831.43217	265.22662	1.0
*	S Q	9	3 a	9	A2o	4	s 5-1	nu4	1566.22640	-11.9	0.471E-02	2422.88602	856.65843	1.0
	R Q	12	11 a	12	Eo	2	a12 1	nu4	c1566.31513	0.0	0.632E-03	2664.58612	1098.29418	0.0
	R Q	15	13 s	15	Ee	4	s14 1	nu4	c1566.32589	0.0	0.581E-03	3314.08002	1747.76485	0.0
*	N P	10	9 s	9	A2e	2	s 6 0	2nu2	1566.34850	-10.9	0.217E-02	2357.03012	790.68053	1.0
*	N P	9	8 s	8	Eo	5	s 5 0	2nu2	1566.43090	-17.4	0.123E-02	2222.07896	655.64632	1.0
*	O P	4	2 s	3	Eo	6	a 0 1	nu4	1566.51389	3.1	0.306E-02	1750.34266	183.82908	1.0
	R Q	14	12 a	14	A2e	2	a13 1	nu4	1566.57291	28.0	0.741E-03	3111.95143	1545.38132	1.0
*	O P	13	12 a	12	A2e	3	s10 1	nu4	1566.80381	-2.5	0.817E-03	2836.76403	1269.95997	1.0
*	N P	6	4 s	5	Eo	8	s 1-1	nu4	c1566.83991	0.0	0.376E-04	1924.42507	357.58418	0.0
*	N P	12	10 s	11	Eo	7	s 7 0	2nu2	c1566.87470	0.0	0.242E-03	2741.48040	1174.60806	0.0
*	T Q	5	0 s	5	A2o	2	s 3 0	2nu2	1566.88834	-54.4	0.413E-03	1864.53554	297.64176	1.0
*	U Q	8	1 s	8	Ee	7	a 5 1	nu4	1566.95610	0.7	0.345E-03	2275.19451	708.23848	1.0
*	M P	8	5 a	7	Eo	12	s 1-1	nu4	1567.00488	-16.4	0.252E-03	2188.69945	621.69293	1.0
	Q Q	14	13 a	14	Eo	2	s13 0	2nu2	1567.17707	-6.0	0.200E-02	3020.91370	1453.73603	1.0
*	N P	13	11 s	12	Ee	8	s 8 0	2nu2	c1567.49583	0.0	0.975E-04	2921.05371	1353.56634	0.0
*	S Q	12	4 s	12	Eo	12	a 6-1	nu4	1567.63150	92.9	0.285E-03	3043.45519	1475.83298	1.0
*	N P	14	12 s	13	A2o	4	s 9 0	2nu2	c1567.66093	0.0	0.703E-04	3112.31371	1544.63569	0.0
	R P	3	0 s	2	A2o	2	s 1 1	nu4	1567.99304	21.4	0.677E+00	1687.22874	119.23784	1.0
*	O P	16	16 s	15	Eo	3	a14 1	nu4	c1568.60154	0.0	0.222E-04	3309.43039	1740.83613	0.0
*	N P	6	4 a	5	Ee	8	a 1-1	nu4	c1568.70132	0.0	0.146E-04	1926.98313	358.28449	0.0
*	U Q	10	1 a	10	Eo	11	s 5 1	nu4	1568.77301	21.0	0.814E-04	2649.79863	1081.02772	1.0
*	O P	12	11 a	11	Eo	5	s 9 1	nu4	1568.77420	19.7	0.795E-03	2667.06641	1098.29418	1.0
*	S Q	4	2 a	4	Ee	2	s 4-1	nu4	1568.89940	3.9	0.229E-02	1753.45203	184.55302	1.0
*	M P	10	6 s	9	A2o	8	a 2-1	nu4	c1569.06442	0.0	0.145E-03	2524.17689	955.10643	0.0
*	M P	11	7 a	10	Eo	13	s 3-1	nu4	1569.30353	33.9	0.342E-04	2693.86729	1124.56715	1.0
*	S Q	13	4 a	13	Ee	14	s 6-1	nu4	1569.35050	-10.2	0.122E-03	3297.69910	1728.34758	1.0
*	S Q	9	3 s	9	A2e	4	a 5-1	nu4	1569.54460	18.4	0.470E-02	2425.72158	856.17882	1.0
*	* P	15	13 s	14	Ee	9	* * *	**	n1570.04716	0.0	0.296E-04	3317.81201	1747.76485	0.0
	R Q	12	11 s	12	Ee	2	s12 1	nu4	1570.15895	-44.3	0.609E-02	2667.60044	1097.43706	1.0
*	S Q	15	5 s	15	Ee	17	a 7-1	nu4	n1570.52831	0.0	0.127E-04	3826.91528	2256.38697	0.0
*	O P	11	10 a	10	Ee	6	s 8 1	nu4	1570.64650	2.5	0.143E-02	2509.43447	938.78822	1.0
*	S Q	4	2 s	4	Eo	1	a 4-1	nu4	1570.68810	-32.2	0.243E-02	1754.52040	183.82908	1.0
	Q Q	10	10 a	10	Ee	1	s10 0	2nu2	1571.25886	17.5	0.202E-01	2292.39035	721.13324	1.0
*	O P	15	15 s	14	A2e	2	a13 1	nu4	c1571.33409	0.0	0.104E-03	3111.95143	1540.62014	0.0
*	S Q	5	2 a	5	Ee	3	s 4-1	nu4	1571.36620	-0.8	0.456E-02	1854.98294	283.61666	1.0
*	* Q	9	1 s	9	Ee	9	* * *	**	c1571.50509	0.0	0.340E-03	2456.41972	884.91558	0.0
*	S Q	10	3 a	10	A2o	5	s 5-1	nu4	1571.53100	-5.4	0.276E-02	2624.08137	1052.54983	1.0
	R Q	14	12 s	14	A2o	2	s13 1	nu4	1571.78985	-44.6	0.289E-02	3116.43000	1544.63569	1.0
	P P	3	1 s	2	Ee	4	s 0 1	nu4	1571.83142	-2.7	0.329E+00	1687.36830	115.53661	1.0
*	O P	16	16 a	15	Ee	4	s14 1	nu4	c1571.92229	0.0	0.332E-04	3314.08002	1742.16845	0.0
	R Q	11	10 a	11	Ee	1	a11 1	nu4	1571.97390	149.0	0.108E-02	2510.74722	938.78822	1.0
	R Q	13	11 a	13	Eo	4	a12 1	nu4	1571.97390	60.5	0.865E-03	2926.26195	1354.29410	1.0
*	M P	8	5 s	7	Ee	11	a 1-1	nu4	1572.09587	19.7	0.365E-03	2193.15945	621.06555	1.0
*	U Q	11	1 a	11	Eo	13	s 5 1	nu4	c1572.39102	0.0	0.537E-04	2867.93460	1295.54540	0.0
*	O P	10	9 a	9	A2o	3	s 7 1	nu4	1572.42290	9.2	0.475E-02	2363.90992	791.48794	1.0
*	T Q	13	2 s	13	Eo	16	s 5 0	2nu2	n1572.45455	0.0	0.282E-04	3342.20422	1769.74967	0.0
	P P	3	1 a	2	Eo	4	a 0 1	nu4	1572.48816	1.3	0.356E+00	1688.76630	116.27827	1.0
	Q Q	13	12 a	13	A2e	2	s12 0	2nu2	1572.87530	-39.1	0.872E-02	2842.83918	1269.95997	0.0
*	S Q	5	2 s	5	Eo	3	a 4-1	nu4	1573.34960	-13.0	0.480E-02	1856.28804	282.93714	1.0
	R Q	15	12 a	15	A2e	3	a13 1	nu4	n1573.89770	0.0	0.398E-03	3412.97167	1839.07397	0.0
*	O P	14	14 s	13	Eo	4	a12 1	nu4	1573.89830	68.8	0.111E-03	2926.26195	1352.37053	1.0
*	M P	6	4 a	5	Ee	9	s 0 1	nu4	1574.00095	25.6	0.537E-03	1932.28288	358.28449	1.0
*	O P	9	8 a	8	Ee	5	s 6 1	nu4	1574.09540	8.6	0.361E-02	2230.52999	656.43545	1.0
*	Q P	3	2 s	2	Eo	2	a 2 1	nu4	c1574.21621	0.0	0.326E-04	1678.63849	104.42207	0.0
*	T Q	7	0 s	7	A2o	3	s 3 0	2nu2	1574.33650	-2.6	0.441E-03	2128.72982	554.39306	1.0
*	S Q	6	2 a	6	Ee	5	s 4-1	nu4	1574.38300	-7.7	0.558E-02	1976.66152	402.27775	1.0
*	O P	15	15 a	14	A2o	2	s13 1	nu4	1574.55965	-32.0	0.156E-03	3116.43000	1541.86715	1.0
*	M P	9	6 a	8	A2e	6	s 2-1	nu4	1575.30372	30.5	0.219E-03	2334.30300	759.00233	1.0
*	M P	11	7 s	10	Ee	14	a 3-1	nu4	1575.65770	-68.6	0.503E-04	2699.70024	1124.03568	1.0
*	O P	8	7 a	7	Eo	6	s 5 1	nu4	1575.65790	1.3	0.500E-02	2109.32675	533.66898	1.0
*	S Q	10	3 s	10	A2e	5	a 5-1	nu4	1575.65829	-3.8	0.270E-02	2627.76507	1052.10640	1.0
*	S Q	13	4 s	13	Eo	14	a 6-1	nu4	c1575.78783	0.0	0.113E-03	3303.82567	1728.05529	0.0
	P P	3	2 s	2	Eo	3	s 1-1	nu4	1575.85181	-7.3	0.491E+00	1680.27461	104.42207	1.0
*	U Q	12	1 a	12	Eo	15	s 5 1	nu4	c1575.98046	0.0	0.296E-04	3104.71571	1528.73467	0.0
	R Q	11	10 s	11	Eo	2	s11 1	nu4	1575.98376	-25.7	0.122E-01	2513.94456	937.95823	1.0
*	N P	4	4 s	3	Eo	2	s 1 0	2nu2	1576.11600	-44.7	0.114E-03	1715.47848	139.35801	0.0
	Q Q	9	9 a	9	A2o	1	s 9 0	2nu2	1576.22510	9.0	0.640E-01	2169.72726	593.50306	1.0
*	O P	13	13 s	12	Ee	3	a11 1	nu4	1576.25780	38.9	0.219E-03	2752.40109	1176.14718	1.0
	P P	3	2 a	2	Ee	3	a 1-1	nu4	1576.31726	-18.1	0.503E+00	1681.50281	105.18374	1.0
*	* Q	10	1 s	10	Ee	11	* * *	**	c1576.50235	0.0	0.265E-03	2657.12980	1080.62686	0.0
*	S Q	6	2 s	6	Eo	5	a 4-1	nu4	1576.66550	10.8	0.580E-02	1978.31225	401.64783	1.0
*	S Q	14	4 a	14	Ee	16	s 6-1	nu4	c1576.72611	0.0	0.443E-04	3575.53753	1998.80673	0.0
	R Q	12	10 a	12	Ee	3	a11 1	nu4	c1577.08455	0.0	0.181E-02	2752.40109	1175.32160	0.0
*	O P	7	6 a	6	A2e	3	s 4 1	nu4	1577.10376	9.8	0.124E-01	2000.32559	423.22281	1.0
	R Q	13	11 s	13	Ee	3	s12 1	nu4	c1577.11565	0.0	0.338E-02	2930.67984	1353.56634	0.0
*	O P	14	14 a	13	Ee	3	s12 1	nu4	1577.13910	17.2	0.170E-03	2930.67984	1353.54246	1.0
*	N P	16	15 s	15	A2e	4	s12 0	2nu2	n1577.17523	0.0	0.209E-04	3433.55954	1856.38431	0.0

	R Q	10	9 a	10	A2o	1	a10 1	nu4	1577.28200	76.4	0.286E-02	2368.76230	791.48794	1.0
*	S Q	11	3 a	11	A2o	6	s 5-1	nu4	1577.44780	5.9	0.141E-02	2844.73618	1267.28897	1.0
*	M P	12	8 a	11	Ee	14	s 4-1	nu4	c1577.70017	0.0	0.133E-04	2883.34833	1305.64882	0.0
*	S Q	7	2 a	7	Ee	6	s 4-1	nu4	1577.97650	-12.3	0.522E-02	2118.39941	540.42168	1.0
*	M P	6	4 s	5	Eo	9	a 0 1	nu4	1578.03843	59.0	0.749E-03	1935.61671	357.58418	1.0
	Q Q	12	11 a	12	Eo	3	s11 0	2nu2	1578.21430	-14.3	0.904E-02	2676.50991	1098.29418	1.0
*	U Q	4	0 a	4	A2e	1	s 4 1	nu4	1578.30761	24.0	0.370E-04	1777.59911	199.29390	0.0
*	O P	12	12 a	11	A2o	2	a10 1	nu4	1578.38700	46.2	0.782E-03	2590.38876	1012.00638	1.0
*	O P	6	5 a	5	Eo	6	s 3 1	nu4	1578.41180	-7.4	0.680E-02	1903.53973	325.12719	1.0
	Q Q	15	13 a	15	Eo	4	a13 0	2nu2	c1578.59648	0.0	0.630E-03	3327.12765	1748.53216	0.0
	R Q	14	11 a	14	Eo	5	a12 1	nu4	1578.67933	-104.4	0.507E-03	3207.45710	1628.76733	1.0
*	N P	15	14 s	14	Eo	7	s11 0	2nu2	n1578.77352	0.0	0.300E-04	3227.37337	1648.59985	0.0
*	N P	5	5 s	4	Ee	3	s 2 0	2nu2	1578.88450	15.4	0.252E-03	1784.15206	205.26910	1.0
	R Q	15	12 s	15	A2o	3	s13 1	nu4	1579.33280	170.3	0.100E-02	3417.77150	1838.45573	0.0
*	N P	14	13 s	13	Ee	5	s10 0	2nu2	c1579.34693	0.0	0.503E-04	3032.15793	1452.80963	0.0
	P P	3	3 s	2	A2e	1	s 2-1	nu4	1579.36157	-3.6	0.144E+01	1665.22352	85.86159	1.0
*	O P	4	3 a	3	A2o	3	s 1 1	nu4	1579.50200	-48.0	0.114E-01	1745.59469	166.08789	1.0
*	O P	5	4 a	4	Ee	6	s 2 1	nu4	1579.51450	-22.4	0.627E-02	1818.92497	239.40823	1.0
*	U Q	13	1 a	13	Eo	17	a 5 1	nu4	n1579.55485	0.0	0.139E-04	3359.95098	1780.39613	0.0
*	O P	13	13 a	12	Eo	4	s11 1	nu4	1579.63540	24.7	0.347E-03	2756.88609	1177.25316	1.0
	P P	3	3 a	2	A2o	1	a 2-1	nu4	1579.63635	-31.0	0.144E+01	1666.29726	86.65781	1.0
*	N P	13	12 a	12	A2o	3	s 9 0	2nu2	1580.08565	53.5	0.252E-03	2849.15114	1269.07084	1.0
*	O P	11	11 s	10	Ee	4	a 9 1	nu4	1580.21800	20.1	0.621E-03	2440.21673	860.00074	1.0
*	O P	9	8 s	8	Eo	6	a 6 1	nu4	1580.39120	-12.6	0.229E-02	2236.03878	655.64632	1.0
*	N P	12	11 s	11	Ee	6	s 8 0	2nu2	c1580.42994	0.0	0.285E-03	2677.86748	1097.43706	0.0
*	O P	10	9 s	9	A2e	3	a 7 1	nu4	1580.44510	-9.2	0.248E-02	2371.12655	790.68053	1.0
*	O P	8	7 s	7	Ee	5	a 5 1	nu4	1580.50220	4.6	0.371E-02	2113.39577	532.89403	1.0
*	N P	11	10 s	10	Eo	5	s 7 0	2nu2	c1580.51076	0.0	0.612E-03	2518.47013	937.95823	0.0
	Q Q	8	8 a	8	Ee	1	s 8 0	2nu2	1580.68848	13.8	0.473E-01	2058.83576	478.14866	1.0
*	S Q	7	2 s	7	Eo	7	a 4-1	nu4	1580.69210	15.1	0.535E-02	2120.53549	539.84490	1.0
*	O P	7	6 s	6	A2o	3	a 4 1	nu4	1580.83545	-6.0	0.102E-01	2003.29416	422.45811	1.0
*	N P	6	6 s	5	A2o	2	s 3 0	2nu2	1580.95880	-23.9	0.940E-03	1864.53554	283.57435	1.0
*	M P	9	6 s	8	A2o	6	a 2-1	nu4	c1580.96083	0.0	0.346E-03	2339.34844	758.38526	0.0
	Q P	14	6 s	13	A2o	13	a 6 0	2nu2	n1580.96522	0.0	0.368E-04	3510.28662	1929.32140	0.0
	Q P	14	5 s	13	Eo	26	a 5 0	2nu2	n1580.97022	0.0	0.164E-04	3548.44687	1967.47665	0.0
	Q P	14	4 s	13	Eo	26	a 4 0	2nu2	n1581.06979	0.0	0.149E-04	3579.63069	1998.56090	0.0
	Q P	14	7 s	13	Ee	23	a 7 0	2nu2	n1581.13406	0.0	0.210E-04	3465.12808	1883.99402	0.0
	Q P	14	3 s	13	A2e	14	a 3 0	2nu2	n1581.24426	0.0	0.276E-04	3603.85451	2022.61025	0.0
	Q P	14	2 s	13	Eo	27	a 2 0	2nu2	n1581.32782	0.0	0.131E-04	3621.14967	2039.82185	0.0
*	O P	6	5 s	5	Ee	6	a 3 1	nu4	1581.33472	-12.6	0.589E-02	1905.70489	324.36891	1.0
	Q P	14	1 s	13	Ee	27	a 1 0	2nu2	n1581.41369	0.0	0.126E-04	3631.51804	2050.10435	0.0
*	T R	9	7 s	10	Ee	1	s10 0	2nu2	c1581.53543	0.0	0.125E-04	2292.39035	710.85630	0.0
	Q P	14	8 s	13	Eo	21	a 8 0	2nu2	n1581.60528	0.0	0.246E-04	3412.97744	1831.37216	0.0
	R Q	10	9 s	10	A2e	1	s10 1	nu4	1581.63488	-31.0	0.459E-01	2372.31851	790.68053	1.0
*	N P	10	10 s	9	Eo	3	s 7 0	2nu2	c1581.65826	0.0	0.857E-03	2301.83799	720.17910	0.0
*	T Q	14	2 s	14	Eo	18	s 5 0	2nu2	n1581.78464	0.0	0.114E-04	3621.60649	2039.82185	0.0
*	O P	5	4 s	4	Eo	5	a 2 1	nu4	1581.82170	-11.5	0.542E-02	1820.47545	238.65260	1.0
	R Q	11	9 a	11	A2o	2	a10 1	nu4	1581.88172	42.2	0.664E-02	2590.38876	1008.51126	1.0
*	O P	12	12 a	11	A2e	2	s10 1	nu4	1582.04860	16.8	0.131E-02	2595.10152	1013.05460	1.0
	Q Q	9	8 a	9	Ee	2	s 8 0	2nu2	1582.17000	43.7	0.122E-02	2238.60108	656.43545	1.0
*	S Q	8	2 a	8	Ee	8	s 4-1	nu4	1582.17010	-10.3	0.403E-02	2280.08814	697.91701	1.0
*	O P	3	2 a	2	Ee	4	s 0 1	nu4	1582.18430	-2.6	0.296E-02	1687.36830	105.18374	1.0
	R Q	12	10 s	12	Eo	4	s11 1	nu4	1582.27954	15.1	0.744E-02	2756.88609	1174.60806	1.0
*	N P	7	7 s	6	Ee	3	s 4 0	2nu2	1582.27973	-97.2	0.733E-03	1956.53845	374.24900	0.0
*	T Q	11	1 s	11	Ee	13	s 4 0	2nu2	c1582.32081	0.0	0.166E-03	2877.52928	1295.19577	0.0
*	S Q	11	3 s	11	A2e	6	a 5-1	nu4	1582.53280	-4.9	0.136E-02	2849.47064	1266.93735	1.0
*	N P	9	9 s	8	A2e	2	s 6 0	2nu2	1582.57620	-6.0	0.199E-02	2175.16330	592.58650	1.0
*	M P	7	5 s	6	Eo	10	a 1-1	nu4	c1582.74525	0.0	0.222E-03	2046.45343	463.70701	0.0
*	N P	8	8 s	7	Eo	4	s 5 0	2nu2	1582.81960	-19.9	0.947E-03	2060.08568	477.26409	1.0
	Q P	14	9 s	13	A2e	9	a 9 0	2nu2	n1582.82220	0.0	0.607E-04	3354.13256	1771.31036	0.0
*	Q P	2	1 a	1	Eo	2	s 1-1	nu4	1582.87780	-5.6	0.395E-03	1639.58757	56.70921	1.0
	Q Q	11	10 a	11	Ee	2	s10 0	2nu2	1583.19070	-13.5	0.178E-01	2521.98027	938.78822	1.0
	R Q	13	10 a	13	Ee	4	a11 1	nu4	c1583.22718	0.0	0.119E-02	3013.74785	1430.51691	0.0
*	U Q	6	0 a	6	A2e	3	s 4 1	nu4	1583.43545	-24.0	0.401E-03	2000.32559	416.88774	1.0
	Q Q	14	12 a	14	A2e	3	s12 0	2nu2	1583.61149	-27.0	0.304E-02	3128.99551	1545.38132	1.0
	Q P	14	10 s	13	Eo	13	a10 0	2nu2	c1583.63891	780.9	0.102E-03	3287.31994	1703.63799	0.0
*	U Q	5	0 s	5	A2o	3	a 4 1	nu4	c1583.85090	0.0	0.607E-03	1881.49182	297.64176	0.0
*	S Q	12	3 a	12	A2o	7	s 5-1	nu4	1583.86710	9.9	0.645E-03	3084.63133	1500.76522	1.0
	R Q	14	11 s	14	Ee	5	s12 1	nu4	1584.01492	28.6	0.129E-02	3212.16852	1628.15646	1.0
*	N P	5	4 s	4	Eo	6	s 1-1	nu4	c1584.04415	0.0	0.286E-04	1822.69759	238.65260	0.0
*	M P	10	7 a	9	Eo	11	s 3-1	nu4	1584.10688	3.7	0.512E-04	2492.68147	908.57496	1.0
*	M P	12	8 s	11	Eo	14	a 4-1	nu4	c1584.16270	0.0	0.195E-04	2889.29120	1305.12737	0.0
*	O P	3	2 s	2	Eo	4	a 0 1	nu4	1584.34430	0.7	0.202E-02	1688.76630	104.42207	1.0
*	O P	11	11 a	10	Eo	3	s 9 1	nu4	1584.37820	18.0	0.115E-02	2445.37497	860.99857	1.0
*	S Q	15	4 a	15	A2o	18	s 6-1	nu4	n1584.50763	0.0	0.145E-04	3871.84041	2287.33278	0.0
*	T Q	9	0 s	9	A2o	5	s 3 0	2nu2	1584.51020	22.5	0.114E-03	2473.00867	888.50072	1.0
	Q Q	7	7 a	7	Eo	1	s 7 0	2nu2	1584.62756	4.4	0.654E-01	1959.73389	375.10677	1.0
*	S Q	14	4 s	14	Eo	16	a 6-1	nu4	n1584.65099	0.0	0.401E-04	3583.21189	1998.56090	0.0
*	Q P	2	1 s	1	Ee	1	a 1-1	nu4	1584.73260	13.2	0.576E-03	1640.67000	55.93872	1.0
*	S Q	8	2 s	8	Eo	8	a 4-1	nu4	1585.48540	18.1	0.407E-02	2282.87892	697.39533	1.0
	R Q	15	11 a	15	Eo	7	a12 1	nu4	n1585.87624	0.0	0.194E-03	3507.35017	1921.47393	0.0
	Q P	14	11 s	13	Ee	11	a11 0	2nu2	n1585.89692	0.0	0.351E-04	3214.05338	1628.15646	0.0
*	O P	4	3 s	3	A2e	3	a 1 1	nu4	1586.12020	66.8	0.780E-02	1751.44460	165.33108	1.0
*	N P	16	16 s	15	Eo	4	s13 0	2nu2	c1586.29251	0.0	0.108E-04	3327.12765	1740.83613	0.0
	R Q	10	8 a	10	Eo	4	a 9 1	nu4	1586.31120	12.3	0.517E-02	2440.21673	853.90676	1.0
	Q Q	8	7 a	8	Eo	1	s 7 0	2nu2	1586.52350	-3.3	0.319E-03	2120.19281	533.66898	1.0
*	O P	10	10 a	9	Ee	4	s 8 1	nu4	1586.61900	8.5	0.188E-02	2307.75139	721.13324	1.0
*	T Q	15	11 a	15	Eo	8	a14 0	2nu2	n1586.83160	0.0	0.224E-04	3508.30553	1921.47393	0.0
*	M P	7	5 s	6	Eo	10	a 1-1	nu4	c1586.95638	0.0	0.348E-03	2049.96683	463.01304	0.0
*	R P	2	0 s	1	A2e	2	a 1 1	nu4	1586.87134	5.5	0.439E+00	1647.28380	60.41301	1.0
*	S Q	3	1 a	3	Eo	1	s 3-1	nu4	1586.90400	5.9	0.207E-02	1703.18168	116.27827	1.0
*	S Q	9	2 a	9	Ee	10	s 4-1	nu4	1586.97610	-10.4	0.267E-02	2461.59358	874.61644	1.0
	R Q	9	8 s	9	Eo	2	s 9 1	nu4	1587.12195	-21.0	0.405E-01	2242.77037	655.64632	1.0
*	R Q	3	1 s	3	Ee	1	s 2 0	2nu2	c1587.17196	0.0	0.431E-04	1702.70943	115.53661	0.0
	R Q	11	9 s	11	A2e	2	s10 1	nu4	1587.29375	6.5	0.308E-01	2595.10152	1007.80842	1.0
	R Q	12	9 a	12	A2o	2	a10 1	nu4	1587.49170	-35.4	0.502E-02	2831.86702	1244.37178	1.0
	Q Q	10	9 a	10	A2o	2	s 9 0	2nu2	1587.83574	-7.0	0.663E-01	2379.32438	791.48794	1.0
	Q Q	6	6 a	6	A2e	1	s 6 0	2nu2	1588.02930	4.7	0.168E+00	1872.43896	284.41013	1.0
	Q Q	13	11 a	13	Eo	5	s11 0	2nu2	1588.23445	-47.5	0.349E-02	2942.53330	1354.29410	1.0
*	N P	15	15 s	14	A2e	3	s12 0	2nu2	c1588.37256	0.0	0.507E-04	3128.99551	1540.62014	0.0
	R Q	13	10 s	13	Eo	6	s11 1	nu4	1588.57240	15.7	0.312E-02	3018.48140	1429.91057	1.0
*	S Q	3	1 s	3	Ee	2	a 3-1	nu4	1588.70930	-33.1	0.225E-02	1704.24922	115.53661	1.0
*	O P	9	9 a	8	A2o	2	s 7 1	nu4	1588.77000	14.4	0.561E-02	2182.27162	593.50306	1.0
*	S Q	4	1 a	4	Eo	2	s 3-1	nu4	1588.84600	2.4	0.473E-02	1784.45704	195.61128	1.0
*	T R	8	6 s	9	A2o	1	s 9 0	2nu2	c1588.94857	0.0	0.385E-04	2169.72726	580.77963	0.0
	Q P	14	12 s	13	A2o	5	a12 0	2nu2	n1589.10039	0.0	0.738E-04	3133.73608	1544.63569	0.0
*	U Q	8	0 a	8	A2e	5	s 4 1	nu4	1589.23560	0.8	0.740E-03	2301.58870	712.35318	1.0
*	R Q	4	1 s	4	Ee	3	s 2 0	2nu2	c1589.24577	0.0	0.107E-03	1784.15206	194.90631	0.0

*	M P	10	7 s	9	Ee	12	a 3-1	nu4	1589.33979	6.4	0.797E-04	2497.30418	907.96503	1.0
*	T Q	12	1 s	12	Ee	15	s 4 0	2nu2	c1589.38424	0.0	0.858E-04	3117.77546	1528.43337	0.0
	R Q	14	10 a	14	Ee	6	a11 1	nu4	1589.88672	-100.6	0.547E-03	3294.04406	1704.14728	1.0
*	N P	14	14 s	13	Eo	5	s11 0	2nu2	c1590.15819	0.0	0.570E-04	2942.53330	1352.37053	0.0
*	S Q	12	3 s	12	A2e	7	a 5-1	nu4	1590.19990	-6.0	0.605E-03	3090.60455	1500.40405	1.0
	Q Q	7	6 a	7	A2e	1	s 6 0	2nu2	c1590.21734	0.0	0.534E-03	2013.44473	423.22281	0.0
*	U Q	7	0 s	7	A2o	4	a 4 1	nu4	1590.25814	4.0	0.208E-02	2144.65080	554.39306	1.0
	Q Q	9	7 a	9	Eo	3	s 7 0	2nu2	1590.28921	-8.2	0.640E-02	2301.83799	711.54796	1.0
	P P	2	1 s	1	Ee	2	s 0 1	nu4	1590.69153	-8.7	0.280E+00	1646.63112	55.93872	1.0
*	M P	5	4 a	4	Ee	8	s 0 1	nu4	c1590.76862	0.0	0.282E-03	1830.17422	239.40823	0.0
	R Q	15	11 s	15	Ee	7	s12 1	nu4	1590.79004	78.3	0.399E-03	3511.74926	1920.96705	1.0
*	O P	8	8 a	7	Ee	3	s 6 1	nu4	1590.82560	18.9	0.383E-02	2068.97237	478.14866	1.0
*	S Q	4	1 s	4	Ee	4	a 3-1	nu4	1590.83310	-20.8	0.509E-02	1785.74149	194.90631	1.0
*	S Q	13	3 a	13	A2o	8	s 5-1	nu4	c1590.85843	0.0	0.263E-03	3343.50878	1752.64820	0.0
	Q Q	5	5 a	5	Eo	1	s 5 0	2nu2	1590.88074	7.8	0.994E-01	1796.96739	206.08743	1.0
*	S Q	9	2 s	9	Eo	10	a 4-1	nu4	1591.08140	1.5	0.266E-02	2465.23154	874.15029	1.0
	P P	2	1 a	1	Eo	3	a 0 1	nu4	1591.10498	-13.9	0.289E+00	1647.81558	56.70921	1.0
*	S Q	5	1 a	5	Eo	4	s 3-1	nu4	1591.33230	4.0	0.663E-02	1885.96189	294.62999	1.0
*	M P	8	6 a	7	A2e	6	s 2-1	nu4	c1591.34421	0.0	0.224E-03	2172.81095	581.47075	0.0
	R Q	11	8 a	11	Ee	5	a 9 1	nu4	1591.43810	-25.9	0.470E-02	2661.81799	1070.37730	1.0
*	N P	13	13 s	12	Ee	4	s10 0	2nu2	c1591.64071	0.0	0.123E-03	2767.79311	1176.14718	0.0
*	R Q	5	1 s	5	Ee	4	s 2 0	2nu2	1591.98123	-17.4	0.182E-03	1885.95123	293.96826	1.0
*	T Q	14	11 a	14	Eo	6	a14 0	2nu2	n1592.01350	0.0	0.571E-04	3220.78083	1628.76733	0.0
	R Q	10	8 s	10	Eo	3	s 9 1	nu4	1592.16445	6.8	0.299E-01	2445.37497	853.21120	1.0
	R Q	9	8 a	9	Ee	3	a 9 1	nu4	1592.21143	4.7	0.585E-01	2248.64641	656.43545	1.0
*	M P	13	9 s	12	A2e	7	a 5-1	nu4	c1592.26173	0.0	0.108E-04	3090.60455	1498.34248	0.0
*	M P	11	8 a	10	Ee	12	s 4-1	nu4	c1592.37232	0.0	0.222E-04	2662.74905	1070.37730	0.0
*	S Q	10	2 a	10	Ee	12	s 4-1	nu4	1592.39190	6.6	0.156E-02	2662.74905	1070.35781	1.0
	R Q	8	7 s	8	Ee	2	s 8 1	nu4	1592.44910	-11.3	0.673E-01	2125.34426	532.89403	1.0
	Q Q	12	10 a	12	Ee	4	s10 0	2nu2	1592.46669	-48.2	0.764E-02	2767.79311	1175.32160	1.0
*	O P	7	7 a	6	Eo	4	s 5 1	nu4	1592.77960	4.2	0.475E-02	1967.88595	375.10677	1.0
*	N P	12	12 s	11	A2o	3	s 9 0	2nu2	1592.83000	-51.2	0.515E-03	2604.84150	1012.00638	0.0
	R Q	12	9 s	12	A2e	3	s10 1	nu4	1592.99788	9.9	0.142E-01	2836.76403	1243.76714	1.0
	Q Q	6	5 a	6	Eo	2	s 5 0	2nu2	1593.17210	53.3	0.393E-02	1918.29396	325.12719	1.0
	Q Q	4	4 a	4	Ee	1	s 4 0	2nu2	1593.17236	10.0	0.107E+00	1733.33458	140.16322	1.0
*	S Q	5	1 s	5	Ee	5	a 3-1	nu4	1593.60630	4.7	0.706E-02	1887.57409	293.96826	1.0
	Q P	14	13 s	13	Ee	7	a13 0	2nu2	n1593.63671	0.0	0.298E-04	3046.44634	1452.80963	0.0
	R Q	13	9 a	13	A2o	3	a10 1	nu4	1593.64820	-46.7	0.260E-02	3092.50946	1498.85659	0.0
	Q Q	8	6 a	8	A2e	2	s 6 0	2nu2	1593.69092	-16.3	0.112E-01	2175.16330	581.47075	1.0
*	N P	11	11 s	10	Ee	5	s 8 0	2nu2	1593.76400	-34.6	0.516E-03	2453.76820	860.00074	1.0
*	M P	5	4 s	4	Eo	7	a 0 1	nu4	c1593.98750	0.0	0.442E-03	1832.63518	238.65260	0.0
*	S Q	15	4 s	15	Eo	18	a 6-1	nu4	n1594.18649	0.0	0.129E-04	3881.31502	2287.12853	0.0
*	S Q	6	1 a	6	Eo	6	s 3-1	nu4	1594.39620	2.6	0.711E-02	2007.63372	413.23778	1.0
	Q Q	15	12 a	15	A2e	4	s12 0	2nu2	1594.50857	230.0	0.798E-03	3433.55954	1839.07397	0.0
*	O P	10	10 s	9	Eo	4	a 8 1	nu4	1594.51660	-9.4	0.987E-03	2314.69664	720.17910	1.0
*	O P	6	6 a	5	A2e	2	s 4 1	nu4	1594.62920	-4.1	0.105E-01	1879.03974	284.41013	1.0
	R Q	14	10 s	14	Eo	8	s11 1	nu4	c1594.78208	0.0	0.106E-02	3298.42397	1703.63799	0.0
	P P	2	2 s	1	Eo	2	s 1-1	nu4	1594.79065	-9.4	0.529E+00	1639.58757	44.79598	1.0
	Q Q	3	3 a	3	A2o	1	s 3 0	2nu2	1594.89917	21.0	0.204E+00	1681.55488	86.65781	1.0
	R Q	10	7 a	10	Eo	4	a 8 1	nu4	1594.99053	-13.8	0.754E-02	2503.56687	908.57496	1.0
	P P	2	2 a	1	Ee	1	a 1-1	nu4	1595.08008	-26.4	0.527E+00	1640.67000	45.58728	1.0
*	U Q	10	0 a	10	A2e	7	s 4 1	nu4	c1595.15438	0.0	0.495E-03	2679.73508	1084.58120	0.0
*	O P	9	9 s	8	A2e	3	a 7 1	nu4	1595.19910	-16.2	0.350E-02	2187.78722	592.58650	0.0
*	M P	8	6 s	7	A2o	5	a 2-1	nu4	c1595.23093	0.0	0.356E-03	2176.00752	580.77963	0.0
	Q Q	5	4 a	5	Ee	1	s 4 0	2nu2	1595.33470	-40.2	0.120E-01	1834.74695	239.40823	1.0
*	U Q	11	0 s	11	A2o	7	a 4 1	nu4	c1595.39214	0.0	0.155E-04	2894.11270	1298.72244	0.0
*	R Q	6	1 s	6	Ee	6	s 2 0	2nu2	1595.43148	-9.8	0.238E-03	2008.05676	412.62430	1.0
*	T R	7	5 s	8	Ee	1	s 8 0	2nu2	c1595.82455	0.0	0.270E-04	2058.83576	463.01304	0.0
*	O P	8	8 s	7	Eo	5	a 6 1	nu4	1595.94920	4.5	0.280E-02	2073.21284	477.26409	1.0
	Q Q	2	2 a	2	Ee	1	s 2 0	2nu2	1596.05774	31.1	0.812E-01	1641.64191	45.58728	1.0
	Q Q	11	9 a	11	A2o	3	s 9 0	2nu2	1596.32610	-41.4	0.319E-01	2604.84150	1008.51126	1.0
*	O P	5	5 a	4	Eo	4	s 3 1	nu4	1596.36660	-6.7	0.510E-02	1802.45470	206.08743	1.0
	Q Q	7	5 a	7	Eo	4	s 5 0	2nu2	1596.37340	-52.7	0.263E-02	2060.08568	463.70701	0.0
	R Q	8	7 a	8	Eo	2	a 8 1	nu4	1596.41870	14.6	0.964E-01	2130.08622	533.66898	1.0
	Q Q	1	1 a	1	Eo	1	s 1 0	2nu2	1596.64954	40.5	0.439E-01	1613.60884	16.96335	1.0
	R Q	15	10 a	15	Ee	8	a11 1	nu4	1596.65478	-500.1	0.198E-03	3592.68167	1995.97688	1.0
	Q Q	4	3 a	4	A2o	1	s 3 0	2nu2	1596.77148	-26.1	0.412E-01	1762.86198	166.08789	1.0
*	O P	7	7 s	6	Ee	4	a 5 1	nu4	1596.85240	5.7	0.388E-02	1971.10083	374.24900	1.0
	R Q	9	7 s	9	Ee	4	s 8 1	nu4	1596.89612	10.3	0.547E-01	2307.75139	710.85630	1.0
*	* Q	9	0 s	9	A2o	6	* * *	**	c1597.08021	0.0	0.215E-02	2485.58087	888.50072	0.0
*	S Q	6	1 s	6	Ee	7	a 3-1	nu4	1597.09560	16.0	0.749E-02	2009.71830	412.62430	1.0
	R Q	12	8 a	12	Ee	7	a 9 1	nu4	1597.13130	-52.2	0.280E-02	2902.78534	1305.64882	1.0
	R Q	11	8 s	11	Eo	5	s 9 1	nu4	1597.29572	7.9	0.152E-01	2667.06641	1069.77148	1.0
*	S Q	10	2 s	10	Eo	12	a 4-1	nu4	1597.49080	-15.5	0.153E-02	2667.43865	1069.94630	1.0
	Q Q	3	2 a	3	Ee	1	s 2 0	2nu2	1597.52502	-6.7	0.233E-01	1702.70943	105.18374	1.0
*	T Q	13	1 s	13	Ee	17	s 4 0	2nu2	n1597.54056	0.0	0.391E-04	3377.68015	1780.13959	0.0
	R Q	7	6 s	7	A2o	1	s 7 1	nu4	1597.62134	-7.7	0.210E+00	2020.08022	422.45811	1.0
	Q Q	2	1 a	2	Eo	1	s 1 0	2nu2	1597.64441	11.5	0.141E-01	1654.35247	56.70921	1.0
*	M P	11	8 s	10	Eo	12	a 4-1	nu4	c1597.66524	0.0	0.348E-04	2667.43865	1069.77148	0.0
*	O P	6	6 s	5	A2o	3	a 4 1	nu4	1597.91830	8.3	0.919E-02	1881.49182	283.57435	1.0
*	O P	4	4 a	3	Ee	4	s 2 1	nu4	1597.96710	-14.6	0.413E-02	1738.13178	140.16322	1.0
	Q Q	9	6 a	9	A2e	2	s 6 0	2nu2	1598.02686	-9.3	0.195E-01	2357.03012	759.00233	1.0
*	S Q	7	1 a	7	Eo	8	s 3-1	nu4	1598.07120	11.1	0.633E-02	2149.39043	551.32034	1.0
*	S Q	13	3 s	13	A2e	8	a 5-1	nu4	n1598.10178	0.0	0.219E-03	3350.53478	1752.43300	0.0
*	S Q	14	3 a	14	A2o	9	s 5-1	nu4	n1598.14585	0.0	0.993E-04	3621.07803	2022.93218	0.0
	Q Q	6	4 a	6	Ee	3	s 4 0	2nu2	1598.24920	-47.6	0.156E-03	1956.53845	358.28449	1.0
*	S Q	11	2 a	11	Ee	14	s 4-1	nu4	1598.38140	-16.9	0.812E-03	2883.34833	1284.96524	1.0
	Q Q	14	11 a	14	Eo	7	s11 0	2nu2	n1598.60604	0.0	0.962E-03	3227.37337	1628.76733	0.0
	R Q	13	9 s	13	A2e	4	s10 1	nu4	1598.66860	-5.0	0.531E-02	3097.01158	1498.34248	1.0
*	T R	12	9 s	13	A2e	2	s12 0	2nu2	c1599.07135	0.0	0.106E-04	2842.83918	1243.76714	0.0
*	O P	5	5 s	4	Ee	5	a 3 1	nu4	1599.09100	4.7	0.459E-02	1804.35963	205.26910	1.0
	Q Q	3	1 a	3	Eo	2	s 1 0	2nu2	1599.19810	-21.1	0.382E-02	1715.47848	116.27827	1.0
*	M P	6	5 a	5	Eo	8	s 1-1	nu4	c1599.29690	0.0	0.130E-03	1924.42507	325.12719	0.0
	Q Q	5	3 a	5	A2o	2	s 3 0	2nu2	1599.30420	-47.2	0.182E-02	1864.53554	265.22662	1.0
*	M P	9	7 a	8	Eo	9	s 3-1	nu4	c1599.57532	0.0	0.576E-04	2311.12235	711.54796	0.0
	Q Q	4	2 a	4	Ee	3	s 2 0	2nu2	1599.59520	-38.4	0.376E-02	1784.15206	184.55302	1.0
*	R Q	7	1 s	7	Ee	7	s 2 0	2nu2	c1599.62197	0.0	0.254E-03	2150.37824	550.75859	0.0
	Q Q	10	8 a	10	Ee	5	s 8 0	2nu2	1599.85826	-31.8	0.319E-01	2453.76820	853.90676	1.0
	R Q	14	9 a	14	A2o	4	a10 1	nu4	c1600.00073	0.0	0.106E-02	3371.74052	1771.74237	0.0
*	O P	4	4 s	3	Eo	4	a 2 1	nu4	1600.27040	-23.5	0.370E-02	1739.63076	139.35801	0.0
	R Q	11	7 a	11	Eo	6	a 8 1	nu4	1600.27690	-64.3	0.532E-02	2724.85048	1124.56715	0.0
*	M P	12	9 a	11	A2o	6	s 5-1	nu4	c1600.36435	0.0	0.181E-04	2844.73618	1244.37178	0.0
	Q Q	8	5 a	8	Eo	5	s 5 0	2nu2	1600.38460	-14.3	0.920E-02	2222.07896	621.69293	1.0
	R Q	7	6 a	7	A2e	2	a 7 1	nu4	1600.58020	23.1	0.293E+00	2023.80070	423.22281	1.0
*	O P	3	3 a	2	A2o	2	s 1 1	nu4	1600.58020	92.7	0.507E-02	1687.22874	86.65781	0.0
*	O P	3	3 s	2	A2e	2	a 1 1	nu4	1600.68060	-31.3	0.502E-02	1686.54532	85.86159	1.0
	R Q	15	10 s	15	Eo	10	s11 1	nu4	1600.86244	30.5	0.309E-03	3596.41349	1995.55410	1.0
*	O P	2	2 a	1	Ee	2	s 0 1	nu4	1601.04360	-2.4	0.114E-02	1646.63112	45.58728	1.0

* U Q	12	0 a	12	A2e	9	s 4 1	nu4	c1601.05107	0.0	0.156E-03	3133.28406	1532.22647	0.0
* S Q	7	1 s	7	Ee	8	a 3-1	nu4	1601.36660	17.2	0.658E-02	2152.12347	550.75859	1.0
Q Q	4	1 a	4	Eo	3	s 1 0	2nu2	1601.36667	-60.9	0.484E-03	1796.98404	195.61128	0.0
R Q	10	7 s	10	Ee	6	s 8 1	nu4	1601.47050	10.6	0.305E-01	2509.43447	907.96503	1.0
R Q	8	6 s	8	A2o	2	s 7 1	nu4	1601.49329	13.0	0.188E+00	2182.27162	580.77963	1.0
Q Q	13	10 a	13	Ee	5	s10 0	2nu2	c1601.63965	0.0	0.246E-02	3032.15793	1430.51691	0.0
* + Q	13	3 s	13	A2e	9	a 9 0	2nu2	n1601.69956	0.0	0.306E-04	3354.13256	1752.43300	0.0
Q Q	7	4 a	7	Ee	4	s 4 0	2nu2	1601.91199	-20.9	0.545E-02	2098.59022	496.67614	1.0
* T R	6	4 s	7	Eo	1	s 7 0	2nu2	c1602.14997	0.0	0.338E-04	1959.73389	357.58418	0.0
* S Q	8	1 a	8	Eo	9	s 3-1	nu4	1602.37660	8.5	0.486E-02	2311.12235	708.74660	1.0
R Q	12	8 s	12	Eo	7	s 9 1	nu4	1602.43610	1.6	0.625E-02	2907.56331	1305.12737	1.0
Q P	13	3 s	12	A2e	12	a 3 0	2nu2	n1602.45105	0.0	0.772E-04	3354.88405	1752.43300	0.0
Q P	13	2 s	12	Eo	25	a 2 0	2nu2	n1602.49571	0.0	0.367E-04	3372.24538	1769.74967	0.0
Q P	13	4 s	12	Eo	24	a 4 0	2nu2	n1602.49633	0.0	0.413E-04	3330.55162	1728.05529	0.0
Q P	13	1 s	12	Ee	25	a 1 0	2nu2	n1602.51937	0.0	0.356E-04	3382.65896	1780.13959	0.0
Q P	13	0 s	12	A2o	13	a 0 0	2nu2	n1602.52931	0.0	0.705E-04	3386.12923	1783.59992	0.0
Q Q	6	3 a	6	A2o	2	s 3 0	2nu2	1602.54700	-18.7	0.277E-02	1986.52632	383.97745	1.0
Q P	13	5 s	12	Ee	24	a 5 0	2nu2	n1602.60109	0.0	0.449E-04	3299.24290	1696.64181	0.0
* M P	6	5 s	5	Ee	8	a 1-1	nu4	c1602.61690	0.0	0.219E-03	1926.98313	324.36891	0.0
R Q	6	5 s	6	Ee	2	s 6 1	nu4	1602.64502	-2.9	0.153E+00	1927.01422	324.36891	1.0
Q P	13	6 s	12	A2o	12	a 6 0	2nu2	c1602.85769	0.0	0.993E-04	3260.93678	1658.07925	0.0
R Q	10	6 a	10	A2e	3	a 7 1	nu4	1602.97800	-15.6	0.171E-01	2558.63033	955.65077	1.0
* O P	2	2 s	1	Eo	3	a 0 1	nu4	1603.01920	-4.0	0.791E-03	1647.81558	44.79598	1.0
R Q	13	8 a	13	Ee	9	a 9 1	nu4	1603.06378	-10.1	0.129E-02	3162.57624	1559.51145	1.0
R Q	9	7 a	9	Eo	4	a 8 1	nu4	1603.14685	-18.3	0.605E-01	2314.69664	711.54796	1.0
Q P	13	7 s	12	Ee	23	a 7 0	2nu2	n1603.35320	0.0	0.554E-04	3215.61660	1612.26340	0.0
* U Q	13	0 s	13	A2o	9	a 4 1	nu4	c1603.50283	0.0	0.383E-04	3387.10358	1783.59992	0.0
* M P	9	7 s	8	Ee	10	a 3-1	nu4	c1603.84503	0.0	0.939E-04	2314.70076	710.85630	0.0
Q P	13	8 s	12	Eo	19	a 8 0	2nu2	n1604.20221	0.0	0.621E-04	3163.27010	1559.06789	0.0
Q Q	5	1 a	5	Eo	5	s 1 0	2nu2	c1604.21548	0.0	0.251E-04	1898.84702	294.62999	0.0
R Q	14	9 s	14	A2e	5	s10 1	nu4	1604.24252	-4.4	0.170E-02	3375.55332	1771.31036	1.0
* R Q	8	1 s	8	Ee	9	s 2 0	2nu2	1604.53210	22.9	0.226E-03	2312.76829	708.23848	1.0
* S Q	11	2 s	11	Eo	14	a 4-1	nu4	1604.68510	2.3	0.803E-03	2889.29120	1284.60633	1.0
Q Q	12	9 a	12	A2o	3	s 9 0	2nu2	1604.77290	-64.6	0.115E-01	2849.15114	1244.37178	0.0
R Q	6	5 a	6	Eo	3	a 6 1	nu4	1604.78687	23.0	0.205E+00	1929.91176	325.12719	1.0
* S Q	2	0 a	2	A2e	1	s 2-1	nu4	1604.80999	-5.2	0.577E-02	1665.22352	60.41301	1.0
* S Q	12	2 a	12	Ee	16	s 4-1	nu4	c1604.88665	0.0	0.387E-03	3123.13837	1518.25026	0.0
Q Q	9	5 a	9	Eo	7	s 5 0	2nu2	1605.04663	-1.1	0.108E-01	2403.98157	798.93483	1.0
R Q	9	6 s	9	A2o	3	s 7 1	nu4	1605.52588	12.2	0.115E+00	2363.90992	758.38526	1.0
Q P	13	9 s	12	A2e	8	a 9 0	2nu2	c1605.55739	0.0	0.139E-03	3103.90006	1498.34248	0.0
* T Q	15	10 a	15	Ee	9	a13 0	2nu2	n1605.66920	0.0	0.103E-04	3601.64608	1995.97688	0.0
* M P	12	9 s	11	A2e	6	a 5-1	nu4	c1605.70229	0.0	0.267E-04	2849.47064	1243.76714	0.0
Q Q	6	2 a	6	Ee	6	s 2 0	2nu2	1605.77860	-4.1	0.133E-02	2008.05676	402.27775	1.0
R Q	12	7 a	12	Eo	8	a 8 1	nu4	1605.85300	-20.5	0.284E-02	2965.18390	1359.32885	1.0
* S Q	15	3 a	15	A2o	10	s 5-1	nu4	n1605.90854	0.0	0.337E-04	3916.99282	2311.08428	0.0
R Q	7	5 s	7	Ee	3	s 6 1	nu4	1605.96033	10.0	0.151E+00	2068.97237	463.01304	1.0
R Q	11	7 s	11	Ee	7	s 8 1	nu4	1606.09122	7.8	0.138E-01	2730.12612	1124.03568	1.0
* T Q	11	0 s	11	A2o	8	s 3 0	2nu2	1606.17933	-259.1	0.101E-02	2904.92768	1298.72244	0.0
Q Q	8	4 a	8	Ee	6	s 4 0	2nu2	1606.26978	-3.5	0.964E-02	2260.72040	654.45027	1.0
R Q	15	9 a	15	A2o	5	a10 1	nu4	c1606.27837	0.0	0.351E-03	3669.04894	2062.79689	0.0
R Q	8	6 a	8	A2e	3	a 7 1	nu4	1606.31604	-4.3	0.216E+00	2187.78722	581.47075	1.0
* S Q	8	1 s	8	Ee	10	a 3-1	nu4	1606.46340	11.2	0.505E-02	2314.70076	708.23848	1.0
Q Q	7	3 a	7	A2o	3	s 3 0	2nu2	1606.50818	12.9	0.106E-01	2128.72982	522.22293	1.0
* T Q	14	1 s	14	Ee	19	s 4 0	2nu2	n1606.63894	0.0	0.169E-04	3656.74329	2050.10435	0.0
* T R	11	8 s	12	Eo	3	s11 0	2nu2	c1606.73744	0.0	0.106E-04	2676.50991	1069.77148	0.0
* S Q	4	1 a	4	Eo	4	s 3 1	nu4	1606.84264	-7.8	0.376E-04	1802.45470	195.61128	1.0
* U Q	14	0 a	14	A2e	11	s 4 1	nu4	c1607.19161	0.0	0.264E-04	3660.92263	2053.74288	0.0
* S Q	9	1 a	9	Eo	11	s 3-1	nu4	1607.31320	13.7	0.334E-02	2492.68147	885.36964	1.0
* S Q	3	1 s	3	Ee	3	a 3 1	nu4	c1607.31938	0.0	0.223E-04	1722.85603	115.53661	0.0
Q P	13	10 s	12	Eo	11	a10 0	2nu2	c1607.47396	0.0	0.678E-04	3037.39059	1429.91057	0.0
Q Q	11	8 a	11	Ee	6	s 8 0	2nu2	1607.48950	-6.8	0.129E-01	2677.86748	1070.37730	1.0
R Q	13	8 s	13	Eo	9	s 9 1	nu4	1607.51640	-12.9	0.220E-02	3166.58558	1559.06789	1.0
R Q	5	4 s	5	Eo	2	s 5 1	nu4	1607.52502	-4.0	0.210E+00	1846.17802	238.65260	1.0
* M P	7	6 a	6	A2e	4	s 2-1	nu4	1607.53203	-37.2	0.152E-03	2030.75856	423.22281	1.0
* M P	10	8 a	9	Ee	10	s 4-1	nu4	c1607.68640	0.0	0.283E-04	2461.59358	853.90676	0.0
Q Q	6	1 a	6	Eo	7	s 1 0	2nu2	c1607.78084	0.0	0.499E-03	2021.01734	413.23778	0.0
* T R	5	3 s	6	A2e	1	s 6 0	2nu2	1607.92216	-1.8	0.741E-04	1872.43896	264.51662	1.0
* S Q	14	3 s	14	A2e	10	a 5-1	nu4	c1608.07474	0.0	0.878E-04	3630.69483	2022.61025	0.0
* S Q	4	0 a	4	A2e	2	s 2-1	nu4	1608.20251	-1.1	0.269E-01	1807.49652	199.29390	1.0
* S Q	3	0 s	3	A2o	2	a 2-1	nu4	1608.23364	-16.3	0.181E-01	1727.47311	119.23784	1.0
R Q	11	6 a	11	A2e	4	a 7 1	nu4	1608.27094	-21.3	0.109E-01	2779.50839	1171.23532	1.0
* M P	4	4 a	3	Ee	6	s 0 1	nu4	c1608.37272	0.0	0.708E-04	1748.53467	140.16322	0.0
* T Q	14	10 a	14	Ee	7	a13 0	2nu2	n1608.74261	0.0	0.306E-03	3312.88989	1704.14728	0.0
* S Q	5	1 a	5	Eo	6	s 3 1	nu4	c1608.90899	0.0	0.105E-03	1903.53973	294.62999	0.0
R Q	14	8 a	14	Ee	11	a 9 1	nu4	n1608.94365	0.0	0.481E-03	3440.68864	1831.74499	0.0
R Q	5	4 a	5	Ee	2	a 5 1	nu4	1609.06116	24.4	0.265E+00	1848.46695	239.40823	1.0
Q Q	15	11 a	15	Eo	9	s11 0	2nu2	n1609.13727	0.0	0.234E-03	3530.61120	1921.47393	0.0
* S Q	4	1 s	4	Ee	5	a 3 1	nu4	c1609.45355	0.0	0.136E-03	1804.35963	194.90631	0.0
R Q	8	5 s	8	Ee	5	s 6 1	nu4	1609.46570	12.6	0.102E+00	2230.52999	621.06555	1.0
R Q	7	5 a	7	Eo	5	a 6 1	nu4	1609.50671	8.8	0.178E+00	2073.21284	463.70701	1.0
* P Q	2	2 s	2	Eo	1	s 1 0	2nu2	c1609.55722	0.0	0.104E-04	1654.35247	44.79598	0.0
R Q	10	6 s	10	A2o	4	s 7 1	nu4	1609.63675	8.3	0.577E-01	2564.74235	955.10643	0.0
R Q	15	9 s	15	A2e	6	s10 1	nu4	c1609.66645	0.0	0.477E-03	3672.10734	2062.43817	0.0
Q Q	10	7 a	10	Eo	5	s 7 0	2nu2	1609.89390	-12.7	0.276E-01	2518.47013	908.57496	1.0
Q Q	7	2 a	7	Ee	7	s 2 0	2nu2	1609.95890	23.4	0.323E-02	2150.37824	540.42168	1.0
* R Q	9	1 s	9	Ee	11	s 2 0	2nu2	c1610.05712	0.0	0.158E-03	2494.97342	884.91558	0.0
P P	1	1 s	0	Ee	1	s 0 1	nu4	1610.10168	-11.0	0.202E+00	1626.27577	16.17299	1.0
R Q	10	5 a	10	Eo	9	a 6 1	nu4	1610.14140	-21.3	0.868E-02	2605.41109	995.26756	1.0
R Q	6	4 s	6	Eo	4	s 5 1	nu4	1610.30237	6.0	0.227E+00	1967.88595	357.58418	1.0
P P	1	1 a	0	Eo	1	a 0 1	nu4	1610.40906	-19.2	0.202E+00	1627.37433	16.96335	1.0
Q P	13	11 s	12	Ee	9	a11 0	2nu2	c1610.44930	0.0	0.702E-04	2964.01347	1353.56634	0.0
R Q	12	7 s	12	Ee	10	s 8 1	nu4	1610.68670	-1.6	0.537E-02	2969.55808	1358.87122	1.0
* M P	4	4 s	3	Eo	6	a 0 1	nu4	1610.98684	21.9	0.123E-03	1750.34266	139.35801	1.0
* P Q	3	2 s	3	Eo	2	s 1 0	2nu2	c1611.05433	0.0	0.617E-04	1715.47848	104.42207	0.0
* M P	7	6 s	6	A2o	4	a 2-1	nu4	1611.07400	-14.4	0.257E-03	2033.53355	422.45811	0.0
* S Q	6	1 a	6	Eo	8	s 3 1	nu4	c1611.11934	0.0	0.175E-03	2024.35796	413.23778	0.0
Q Q	8	3 a	8	A2o	4	s 3 0	2nu2	1611.15393	19.3	0.154E-01	2290.98871	679.83671	1.0
Q Q	9	4 a	9	Ee	8	s 4 0	2nu2	1611.19385	1.1	0.102E-01	2442.65175	831.45801	1.0
R Q	13	7 a	13	Eo	10	a 8 1	nu4	1611.42334	75.3	0.121E-02	3224.06858	1612.65277	1.0
* S Q	5	1 s	5	Ee	6	a 3 1	nu4	1611.73550	-11.3	0.397E-03	1905.70489	293.96826	1.0
* S Q	13	2 a	13	Ee	18	s 4-1	nu4	1611.78316	-124.7	0.172E-03	3381.80862	1770.01299	1.0
* M P	10	8 s	9	Eo	10	a 4-1	nu4	c1612.02011	0.0	0.463E-04	2465.23154	853.21120	0.0
Q Q	7	1 a	7	Eo	9	s 1 0	2nu2	c1612.07147	0.0	0.116E-02	2163.38989	551.32034	0.0
R Q	9	6 a	9	A2e	3	a 7 1	nu4	1612.12317	-10.5	0.113E+00	2371.12655	759.00233	1.0
R Q	4	3 s	4	A2e	1	s 4 1	nu4	1612.26758	-4.5	0.538E+00	1777.59911	165.33108	1.0
* S Q	9	1 s	9	Ee	12	a 3-1	nu4	1612.38801	-5.9	0.355E-02	2497.30418	884.91558	1.0
R Q	14	8 s	14	Eo	11	s 9 1	nu4	1612.48292	-50.9	0.679E-03	3443.86017	1831.37216	1.0
* S Q	12	2 s	12	Eo	16	a 4-1	nu4	1612.57050	21.3	0.397E-03	3130.50935	1517.94098	1.0

R Q	6	4 a	6	Ee	4	a 5 1	nu4	1612.81702	6.8	0.268E+00	1971.10083	358.28449	1.0
* S Q	10	1 a	10	Eo	13	s 3-1	nu4	1612.84140	18.3	0.212E-02	2693.86729	1081.02772	1.0
R Q	9	5 s	9	Ee	7	s 6 1	nu4	1613.07532	7.0	0.565E-01	2411.44913	798.37451	1.0
* T R	4	2 s	5	Eo	1	s 5 0	2nu2	c1613.13909	0.0	0.341E-04	1796.96739	183.82908	0.0
* P Q	4	2 s	4	Eo	3	s 1 0	2nu2	1613.14663	-83.3	0.197E-03	1796.98404	183.82908	0.0
R Q	7	4 s	7	Eo	6	s 5 1	nu4	1613.29224	5.7	0.170E+00	2109.32675	496.03508	1.0
R Q	4	3 a	4	A2o	2	a 4 1	nu4	1613.37085	15.8	0.641E+00	1779.45716	166.08789	1.0
* S Q	5	0 s	5	A2o	4	a 2-1	nu4	1613.39844	30.4	0.404E-01	1911.03716	297.64176	0.0
* S Q	7	1 a	7	Eo	10	s 3 1	nu4	c1613.42002	0.0	0.112E-03	2164.74052	551.32034	0.0
Q Q	13	9 a	13	A2o	4	s 9 0	2nu2	1613.44003	-170.9	0.331E-02	3112.31371	1498.85659	1.0
* M P	13	10 s	12	Eo	12	a 6-1	nu4	c1613.55281	0.0	0.101E-04	3043.45519	1429.91057	0.0
R Q	12	6 a	12	A2e	5	a 7 1	nu4	1613.60390	19.6	0.551E-02	3019.16437	1405.56243	1.0
* * Q	14	10 a	14	Ee	9	* * *	**	n1613.66473	0.0	0.339E-03	3317.81201	1704.14728	0.0
R Q	11	6 s	11	A2o	5	s 7 1	nu4	1613.75320	6.5	0.247E-01	2784.51339	1170.76084	1.0
* S Q	6	0 a	6	A2e	4	s 2-1	nu4	1613.87207	12.5	0.384E-01	2030.75856	416.88774	1.0
* T R	10	7 s	11	Ee	2	s10 0	2nu2	c1614.01441	0.0	0.193E-04	2521.98027	907.96503	0.0
* S Q	6	1 s	6	Ee	8	a 3 1	nu4	c1614.04368	0.0	0.736E-03	2026.67007	412.62430	0.0
R Q	8	5 a	8	Eo	6	a 6 1	nu4	1614.34534	-5.1	0.107E+00	2236.03878	621.69293	1.0
R Q	5	3 s	5	A2e	2	s 4 1	nu4	1614.52319	0.7	0.640E+00	1879.03974	264.51662	1.0
Q P	13	12 s	12	A2o	4	a12 0	2nu2	c1614.56715	0.0	0.106E-03	2883.63670	1269.07084	0.0
R Q	15	8 a	15	Ee	13	a 9 1	nu4	n1614.58060	0.0	0.150E-03	3736.70087	2122.12027	0.0
Q Q	8	2 a	8	Ee	9	s 2 0	2nu2	1614.85522	39.4	0.449E-02	2312.76829	697.91701	1.0
R Q	13	7 s	13	Ee	12	s 8 1	nu4	1615.20440	2.3	0.182E-02	3227.46757	1612.26340	1.0
R Q	11	5 a	11	Eo	11	a 6 1	nu4	1615.36230	-10.4	0.540E-02	2825.87540	1210.51206	1.0
Q Q	12	8 a	12	Ee	8	s 8 0	2nu2	1615.41188	69.9	0.417E-02	2921.05371	1305.64882	1.0
* M P	11	9 a	10	A2o	5	s 5-1	nu4	c1615.56927	0.0	0.261E-04	2624.08137	1008.51126	0.0
* S Q	8	1 a	8	Eo	10	s 3 1	nu4	1615.57980	-42.5	0.563E-03	2324.33065	708.74660	1.0
* M P	8	7 a	7	Eo	8	s 3-1	nu4	c1615.72169	0.0	0.449E-04	2149.39043	533.66898	0.0
* R Q	10	1 s	10	Ee	13	s 2 0	2nu2	1615.83178	-42.8	0.595E-04	2696.46292	1080.62686	1.0
* P Q	5	2 s	5	Eo	5	s 1 0	2nu2	1615.90850	-13.8	0.486E-03	1898.84702	282.93714	1.0
* T Q	13	10 a	13	Ee	7	a13 0	2nu2	n1615.92943	0.0	0.149E-04	3046.44634	1430.51691	0.0
R Q	5	3 a	5	A2o	3	a 4 1	nu4	1616.26611	9.1	0.741E+00	1881.49182	265.22662	1.0
* S Q	7	1 s	7	Ee	9	a 3 1	nu4	1616.32925	-68.1	0.984E-03	2167.09465	550.75859	0.0
Q Q	9	3 a	9	A2o	5	s 3 0	2nu2	1616.35193	16.9	0.164E-01	2473.00867	856.65843	1.0
R Q	8	4 s	8	Eo	7	s 5 1	nu4	1616.40686	4.8	0.104E+00	2270.27698	653.87060	1.0
R Q	10	4 a	10	Ee	10	a 5 1	nu4	1616.42140	-14.8	0.824E-02	2643.95837	1027.53549	1.0
* M P	5	5 a	4	Eo	6	s 1-1	nu4	c1616.60932	0.0	0.398E-04	1822.69759	206.08743	0.0
R Q	10	5 s	10	Ee	9	s 6 1	nu4	1616.71700	23.7	0.267E-01	2611.48776	994.77313	0.0
R Q	7	4 a	7	Ee	5	a 5 1	nu4	1616.71840	-12.3	0.187E+00	2113.39577	496.67614	1.0
R Q	14	7 a	14	Eo	12	a 8 1	nu4	n1616.75096	0.0	0.427E-03	3501.07234	1884.32138	0.0
R Q	3	2 s	3	Eo	3	s 3 1	nu4	1616.87756	-7.9	0.322E+00	1721.30042	104.42207	1.0
Q Q	11	7 a	11	Eo	7	s 7 0	2nu2	1616.91531	20.6	0.101E-01	2741.48040	1124.56715	1.0
R Q	6	3 s	6	A2e	3	s 4 1	nu4	1617.00696	-2.1	0.531E+00	2000.32559	383.31842	1.0
Q R	0	0 a	1	A2e	1	s 0 0	2nu2	1617.05493	30.7	0.838E-01	1617.84526	0.79340	1.0
Q Q	8	1 a	8	Eo	11	s 1 0	2nu2	1617.28570	64.4	0.112E-02	2326.02586	708.74660	1.0
R Q	15	8 s	15	Eo	13	s 9 1	nu4	c1617.30382	0.0	0.186E-03	3739.12523	2121.81062	0.0
* S Q	15	3 s	15	A2e	11	a 5-1	nu4	n1617.40917	0.0	0.338E-04	3928.43429	2311.02512	0.0
R Q	3	2 a	3	Ee	3	a 3 1	nu4	1617.67310	8.1	0.365E+00	1722.85603	105.18374	1.0
* T R	3	1 s	4	Ee	1	s 4 0	2nu2	c1617.79869	0.0	0.245E-04	1733.33458	115.53661	0.0
R Q	12	6 s	12	A2o	6	s 7 1	nu4	1617.81800	-1.4	0.922E-02	3022.97191	1405.15377	1.0
* S Q	9	1 a	9	Eo	12	s 3 1	nu4	1617.89200	-18.2	0.326E-03	2503.26346	885.36964	1.0
Q Q	10	6 a	10	A2e	4	s 6 0	2nu2	1618.17010	0.1	0.469E-01	2573.82086	955.65077	1.0
R Q	4	2 s	4	Eo	4	s 3 1	nu4	1618.62512	-5.0	0.422E+00	1802.45470	183.82908	1.0
* S Q	8	1 s	8	Ee	11	a 3 1	nu4	c1618.64799	0.0	0.103E-02	2326.88564	708.23848	0.0
R Q	13	6 a	13	A2e	6	a 7 1	nu4	c1618.72137	0.0	0.224E-02	3277.13487	1658.42705	0.0
* S Q	11	1 a	11	Eo	15	s 3-1	nu4	1618.85630	-4.4	0.129E-02	2914.40214	1295.54540	1.0
* S Q	14	2 a	14	Ee	20	s 4-1	nu4	n1618.92359	0.0	0.724E-04	3658.96694	2040.04335	0.0
* S Q	10	1 s	10	Ee	14	a 3-1	nu4	1619.06770	-56.8	0.252E-02	2699.70024	1080.62686	1.0
* M P	8	7 s	7	Ee	8	a 3-1	nu4	c1619.23098	0.0	0.755E-04	2152.12347	532.89403	0.0
R Q	6	3 a	6	A2o	3	a 4 1	nu4	1619.31628	-4.3	0.596E+00	2003.29416	383.97745	1.0
* M P	5	5 s	4	Ee	7	a 1-1	nu4	1619.35155	18.7	0.700E-04	1824.61878	205.26910	1.0
* * Q	9	5 a	9	Eo	8	* * *	**	1619.37109	-12.7	0.518E-01	2418.30719	798.93483	0.0
* P Q	6	2 s	6	Eo	7	s 1 0	2nu2	1619.37109	15.8	0.124E-02	2021.01734	401.64783	0.0
R Q	9	4 s	9	Eo	9	s 5 1	nu4	1619.56946	10.3	0.542E-01	2450.50862	830.94019	1.0
R Q	14	7 s	14	Ee	14	s 8 1	nu4	1619.60211	-56.8	0.548E-03	3503.60181	1883.99402	1.0
R Q	7	3 s	7	A2e	4	s 4 1	nu4	1619.62305	-5.7	0.360E+00	2141.24555	521.62193	1.0
R Q	4	2 a	4	Ee	5	a 3 1	nu4	1619.80688	2.7	0.477E+00	1804.35963	184.55302	1.0
* M P	11	9 s	10	A2e	5	a 5-1	nu4	c1619.95671	0.0	0.419E-04	2627.76507	1007.80842	0.0
* S Q	10	1 a	10	Eo	14	s 3 1	nu4	1620.19697	37.4	0.199E-03	2701.22095	1081.02772	1.0
R Q	11	5 s	11	Ee	11	s 6 1	nu4	1620.32790	10.4	0.110E-01	2830.40785	1210.08099	1.0
Q Q	9	2 a	9	Ee	11	s 2 0	2nu2	1620.36761	106.3	0.526E-02	2494.97342	874.61644	0.0
R Q	12	5 a	12	Eo	13	a 6 1	nu4	1620.36761	-20.8	0.264E-02	3064.84628	1444.47659	0.0
R Q	5	2 s	5	Eo	6	s 3 1	nu4	1620.60144	-11.5	0.390E+00	1903.53973	282.93714	1.0
* T Q	13	0 s	13	A2o	10	s 3 0	2nu2	c1620.67282	0.0	0.285E-03	3404.26861	1783.59992	0.0
R Q	8	4 a	8	Ee	7	a 5 1	nu4	1620.74414	-1.0	0.105E+00	2275.19451	654.45027	1.0
* T R	9	6 s	10	A2o	2	s 9 0	2nu2	c1620.93843	0.0	0.638E-04	2379.32438	758.38526	0.0
* S Q	13	2 s	13	Eo	18	a 4-1	nu4	1620.94250	70.1	0.196E-03	3390.68516	1769.74967	1.0
* * Q	9	1 s	9	Ee	13	* * *	**	1621.12310	27.0	0.916E-03	2506.03598	884.91558	1.0
R Q	2	1 s	2	Ee	2	s 2 1	nu4	1621.35901	-10.2	0.360E+00	1677.29875	55.93872	1.0
R Q	11	4 a	11	Ee	12	a 5 1	nu4	1621.54130	-7.7	0.526E-02	2864.04712	1242.50505	1.0
* S Q	7	0 s	7	A2o	5	a 2-1	nu4	1621.61780	33.4	0.513E-01	2176.00752	554.39306	1.0
R Q	10	3 a	10	A2o	6	a 4 1	nu4	1621.76120	-40.5	0.148E-01	2674.31508	1052.54983	1.0
R Q	15	7 a	15	Eo	14	a 8 1	nu4	n1621.76156	0.0	0.127E-03	3795.86969	2174.10813	0.0
R Q	13	6 s	13	A2o	7	s 7 1	nu4	1621.79410	-27.1	0.305E-02	3279.87606	1658.07925	1.0
Q Q	14	9 a	14	A2o	5	s 9 0	2nu2	n1621.85094	0.0	0.705E-03	3393.59331	1771.74237	0.0
R Q	2	1 a	2	Eo	2	a 2 1	nu4	1621.92896	-3.2	0.393E+00	1678.63849	56.70921	1.0
* S Q	8	0 a	8	A2e	6	s 2-1	nu4	1621.95290	30.8	0.361E-01	2334.30300	712.35318	1.0
R Q	5	2 a	5	Ee	6	a 3 1	nu4	1622.08704	-11.9	0.436E+00	1905.70489	283.61666	1.0
R Q	8	3 s	8	A2e	5	s 4 1	nu4	1622.29993	-9.1	0.208E+00	2301.58870	679.28786	1.0
R Q	7	3 a	7	A2o	4	a 4 1	nu4	1622.42651	-13.6	0.387E+00	2144.65080	522.22293	1.0
* S Q	11	1 a	11	Eo	16	s 3 1	nu4	1622.54520	62.6	0.106E-03	2918.08434	1295.54540	1.0
R Q	3	1 s	3	Ee	4	s 2 1	nu4	1622.59370	-14.7	0.528E+00	1738.13178	115.53661	1.0
* Q Q	1	1 a	1	Eo	2	s 1-1	nu4	1622.62390	-3.2	0.435E-03	1639.58757	16.96335	1.0
R Q	6	2 s	6	Eo	8	s 3 1	nu4	1622.70898	-11.5	0.294E+00	2024.35796	401.64783	1.0
Q Q	15	10 a	15	Ee	11	s10 0	2nu2	n1622.71857	0.0	0.128E-03	3618.69545	1995.97688	0.0
R Q	10	4 s	10	Eo	11	s 5 1	nu4	1622.72170	15.5	0.247E-01	2649.79863	1027.07848	1.0
Q Q	9	1 a	9	Eo	13	s 1 0	2nu2	1623.07891	32.5	0.178E-02	2508.44530	885.36964	1.0
R Q	3	1 a	3	Eo	4	a 2 1	nu4	1623.35205	-4.4	0.586E+00	1739.63076	116.27827	1.0
R Q	14	6 a	14	A2e	7	a 7 1	nu4	c1623.49036	0.0	0.752E-03	3553.07739	1929.61381	0.0
* P Q	7	2 s	7	Eo	9	s 1 0	2nu2	1623.55172	67.3	0.750E-02	2163.38989	539.84490	0.0
* Q Q	2	1 a	2	Eo	3	s 1-1	nu4	1623.56660	12.0	0.108E-02	1680.27461	56.70921	0.0
* M P	9	8 a	8	Ee	8	s 4-1	nu4	c1623.65242	0.0	0.252E-04	2280.08814	656.43545	0.0
Q Q	13	8 a	13	Ee	10	s 8 0	2nu2	1623.76675	96.7	0.110E-02	3183.26853	1559.51145	1.0
R Q	12	5 s	12	Ee	13	s 6 1	nu4	1623.87590	4.1	0.400E-02	3067.98073	1444.10524	1.0
R Q	15	7 s	15	Ee	16	s 8 1	nu4	n1623.88402	0.0	0.147E-03	3797.72022	2173.83620	0.0
Q P	12	1 s	11	Ee	23	a 1 0	2nu2	n1623.99488	0.0	0.910E-04	3152.42825	1528.43337	0.0
R Q	4	1 s	4	Ee	6	s 2 1	nu4	1624.01611	-25.5	0.556E+00	1818.92497	194.90631	1.0
Q P	12	2 s	11	Eo	23	a 2 0	2nu2	n1624.03791	0.0	0.935E-04	3141.97889	1517.94098	0.0

* *	Q	10	1 s	10	Ee	15	* * *	**	1624.13583	-63.1	0.710E-03	2704.76900	1080.62686	0.0
	Q P	12	3 s	11	A2e	12	a 3 0	2nu2	c1624.14998	0.0	0.195E-03	3124.55318	1500.40405	0.0
*	T R	7	4 s	8	Eo	1	s 7 0	2nu2	c1624.15733	0.0	0.181E-04	2120.19281	496.03508	0.0
*	T Q	15	9 a	15	A2o	6	a12 0	2nu2	n1624.30746	0.0	0.380E-04	3687.10435	2062.79689	0.0
	Q P	12	4 s	11	Eo	22	a 4 0	2nu2	c1624.31720	0.0	0.104E-03	3100.14869	1475.83298	0.0
	R Q	6	2 a	6	Ee	8	a 3 1	nu4	1624.39026	-20.6	0.323E-02	2026.67007	402.27775	1.0
	Q Q	12	7 a	12	Eo	9	s 7 0	2nu2	c1624.41796	0.0	0.299E-02	2983.73131	1359.32885	0.0
*	Q Q	1	1 s	1	Ee	1	a 1-1	nu4	1624.49370	-33.1	0.620E-03	1640.67000	16.17299	1.0
	Q P	12	5 s	11	Ee	22	a 5 0	2nu2	c1624.63839	0.0	0.111E-03	3068.74479	1444.10524	0.0
	Q Q	11	6 a	11	A2e	5	s 6 0	2nu2	1624.64620	13.8	0.158E-01	2795.88014	1171.23532	1.0
*	M P	6	6 a	5	A2e	4	s 2-1	nu4	c1624.67076	0.0	0.553E-04	1909.08037	284.41013	0.0
* *	Q	10	5 a	10	Eo	10	* * *	**	1624.73388	0.0	0.202E-01	2620.00139	995.26756	0.0
	R Q	4	1 a	4	Eo	5	a 2 1	nu4	1624.86279	-13.8	0.612E+00	1820.47545	195.61128	1.0
	R Q	7	2 s	7	Eo	10	s 3 1	nu4	1624.89551	-1.1	0.183E+00	2164.74052	539.84490	1.0
* *	Q	9	4 a	9	Ee	9	* * *	**	1624.96540	36.9	0.487E-01	2456.41972	831.45801	0.0
	R Q	13	5 a	13	Eo	15	a 6 1	nu4	1624.96604	60.3	0.103E-02	3321.91790	1696.95789	0.0
	R Q	9	3 s	9	A2e	6	s 4 1	nu4	1624.96608	11.7	0.105E+00	2481.14373	856.17882	1.0
*	S Q	12	1 s	12	Ee	17	s 3 1	nu4	1624.98373	-87.5	0.138E-03	3153.72715	1528.73467	1.0
*	Q Q	3	1 a	3	Eo	5	s 1-1	nu4	1625.03140	-5.6	0.683E-03	1741.31023	116.27827	1.0
*	S Q	12	1 a	12	Eo	18	s 3-1	nu4	1625.12892	-37.4	0.699E-03	3153.86733	1528.73467	1.0
	Q P	12	6 s	11	A2o	11	a 6 0	2nu2	c1625.17702	0.0	0.241E-03	3030.33086	1405.15377	0.0
	R Q	1	0 s	1	A2o	1	s 1 1	nu4	1625.46509	-19.4	0.119E+01	1645.35692	19.88989	1.0
	R Q	5	1 s	5	Ee	7	s 2 1	nu4	1625.51709	-39.1	0.472E+00	1919.48926	293.96826	1.0
*	Q Q	2	1 s	2	Ee	3	a 1-1	nu4	1625.56230	-17.9	0.204E-02	1681.50281	55.93872	1.0
	R Q	8	3 a	8	A2o	5	a 4 1	nu4	1625.60925	10.0	0.211E+00	2305.44496	679.83671	1.0
	R Q	14	6 s	14	A2o	8	s 7 1	nu4	n1625.67415	0.0	0.899E-03	3554.99555	1929.32140	0.0
	R Q	11	4 s	11	Eo	13	s 5 1	nu4	1625.82987	18.0	0.992E-02	2867.93460	1242.10653	1.0
*	S Q	15	2 a	15	Ee	21	s 4-1	nu4	n1625.94980	0.0	0.272E-04	3954.07205	2328.12225	0.0
	Q P	12	7 s	11	Ee	21	a 7 0	2nu2	c1626.02691	0.0	0.130E-03	2984.89551	1358.87122	0.0
	Q Q	10	2 a	10	Ee	13	s 2 0	2nu2	1626.10136	-37.5	0.595E-02	2696.46292	1070.35781	1.0
	R Q	2	0 a	2	A2e	2	a 1 1	nu4	1626.12891	-34.0	0.162E+01	1686.54532	60.41301	1.0
	R Q	12	4 a	12	Ee	14	a 5 1	nu4	c1626.16338	0.0	0.255E-02	3102.33607	1476.17634	0.0
*	S Q	11	1 s	11	Ee	16	a 3-1	nu4	1626.19570	-216.2	0.220E-02	2921.41309	1295.19577	0.0
	R Q	5	1 a	5	Eo	7	a 2 1	nu4	1626.35205	-22.6	0.509E+00	1920.98430	294.62999	1.0
	R Q	3	0 s	3	A2o	3	s 1 1	nu4	1626.35217	-46.8	0.170E+01	1745.59469	119.23784	1.0
	R Q	7	2 a	7	Ee	9	a 3 1	nu4	1626.67163	-13.4	0.201E+00	2167.09465	540.42168	1.0
	R Q	11	3 a	11	A2o	7	a 4 1	nu4	1626.82580	20.7	0.103E-01	2894.11270	1267.28897	1.0
	R Q	8	2 s	8	Eo	10	s 3 1	nu4	1626.93188	-34.4	0.102E+00	2324.33065	697.39533	1.0
	R Q	6	1 s	6	Ee	9	s 2 1	nu4	1627.04780	-42.3	0.335E+00	2039.67633	412.62430	1.0
*	Q Q	4	1 a	4	Eo	6	s 1-1	nu4	1627.08760	12.9	0.192E-03	1822.69759	195.61128	0.0
*	M P	9	8 s	8	Eo	8	a 4-1	nu4	c1627.23356	0.0	0.422E-04	2282.87892	655.64632	0.0
*	Q Q	3	1 s	3	Ee	5	a 1-1	nu4	1627.26600	2.9	0.297E-02	1742.80232	115.53661	1.0
	Q P	12	8 s	11	Eo	18	a 8 0	2nu2	c1627.30797	0.0	0.140E-03	2932.43235	1305.12737	0.0
	R Q	4	0 a	4	A2e	3	a 1 1	nu4	1627.32153	-61.7	0.147E+01	1826.62160	199.29390	1.0
	R Q	13	5 s	13	Ee	15	s 6 1	nu4	1627.34496	-22.3	0.130E-02	3323.98900	1696.64181	1.0
*	M P	6	6 s	5	A2o	4	a 2-1	nu4	c1627.46466	0.0	0.961E-04	1911.03716	283.57435	0.0
*	U R	8	5 s	9	Ee	3	a 9 1	nu4	c1627.58130	0.0	0.467E-04	2248.64641	621.06555	0.0
	R Q	10	3 s	10	A2e	7	s 4 1	nu4	1627.62912	4.4	0.463E-01	2679.73508	1052.10640	1.0
*	S Q	13	1 s	13	Eo	19	s 3 1	nu4	c1627.70136	0.0	0.224E-04	3408.09388	1780.39613	0.0
	R Q	6	1 a	6	Eo	9	a 2 1	nu4	1627.81970	-18.5	0.354E+00	2041.05933	413.23778	1.0
	R Q	15	6 a	15	A2e	8	a 7 1	nu4	1627.91596	450.7	0.215E-03	3846.76937	2218.89848	1.0
	R Q	5	0 s	5	A2o	5	s 1 1	nu4	1627.93896	-65.1	0.110E+01	1925.58723	297.64176	1.0
	R Q	7	1 s	7	Ee	10	s 2 1	nu4	1628.61047	-31.0	0.204E+00	2179.37216	550.75859	1.0
*	P Q	8	2 s	8	Eo	11	s 1 0	2nu2	1628.63830	77.7	0.356E-02	2326.02586	697.39533	1.0
* *	Q	11	1 s	11	Ee	17	* * *	**	n1628.71542	0.0	0.301E-03	2923.91119	1295.19577	0.0
	R Q	12	4 s	12	Eo	15	s 5 1	nu4	1628.88250	-2.3	0.354E-02	3104.71571	1475.83298	1.0
* *	Q	9	3 s	9	A2o	6	* * *	**	1628.92261	1.7	0.947E-01	2485.58087	856.65843	1.0
	R Q	8	2 a	8	Ee	11	a 3 1	nu4	1628.96936	7.3	0.107E+00	2326.88564	697.91701	1.0
	R Q	9	2 s	9	Eo	12	s 3 1	nu4	1629.11328	1.1	0.515E-01	2503.26346	874.15029	1.0
	R Q	14	5 a	14	Eo	17	a 6 1	nu4	1629.15832	289.9	0.333E-03	3596.87180	1967.74247	1.0
	Q P	12*	9 s	11	A2e	7	a 9 0	2nu2	c1629.18238	0.0	0.290E-03	2872.94421	1243.76714	0.0
	R Q	6	0 a	6	A2e	5	a 1 1	nu4	1629.19092	-66.3	0.716E+00	2046.08529	416.88774	1.0
* *	Q	14	2 s	14	Eo	20	* * *	**	n1629.20398	0.0	0.101E-03	3669.02583	2039.82185	0.0
	R Q	7	1 a	7	Eo	11	a 2 1	nu4	1629.31335	10.9	0.212E+00	2180.63260	551.32034	1.0
*	R Q	10	2 a	10	Ee	14	a 3-1	nu4	c1629.33784	0.0	0.182E-04	2699.70024	1070.35781	0.0
	Q Q	10	1 a	10	Eo	15	s 1 0	2nu2	1629.36356	-80.6	0.331E-02	2710.39934	1081.02772	1.0
	R Q	15	6 s	15	A2o	9	s 7 1	nu4	1629.45080	-49.5	0.237E-03	3848.11122	2218.65547	1.0
* *	Q	10	4 a	10	Ee	11	* * *	**	1629.59360	-7.1	0.181E-01	2657.12980	1027.53549	1.0
*	Q Q	4	1 s	4	Ee	7	a 1-1	nu4	1629.71400	15.3	0.276E-02	1824.61878	194.90631	1.0
*	Q Q	5	1 a	5	Eo	8	s 1-1	nu4	1629.79350	-15.8	0.165E-03	1924.42507	294.62999	1.0
*	T R	6	3 s	7	A2e	1	s 6 0	2nu2	c1630.12173	0.0	0.670E-04	2013.44473	383.31842	0.0
	R Q	13	4 a	13	Ee	16	a 5 1	nu4	c1630.19625	0.0	0.960E-03	3358.53654	1728.34758	0.0
	R Q	11	3 s	11	A2e	8	s 4 1	nu4	1630.22200	64.5	0.184E-01	2897.15290	1266.93735	1.0
	R Q	8	1 s	8	Ee	12	s 2 1	nu4	1630.23291	-12.5	0.109E+00	2338.47264	708.23848	1.0
	R Q	7	0 s	7	A2o	6	s 1 1	nu4	1630.30884	-54.0	0.394E+00	2184.70730	554.39306	1.0
	P Q	1	1 s	1	Ee	2	s 0 1	nu4	1630.45740	-7.3	0.268E+00	1646.63112	16.17299	1.0
	Q Q	11	5 a	11	Eo	12	s 5 0	2nu2	1630.67481	-46.9	0.630E-02	2841.19156	1210.51206	1.0
	R Q	10	0 a	10	A2e	8	a 1 1	nu4	1630.72330	20.3	0.318E-01	2715.30247	1084.58120	1.0
	R Q	14	5 s	14	Eo	17	s 6 1	nu4	c1630.77499	0.0	0.376E-03	3598.22580	1967.45765	0.0
	P Q	1	1 a	1	Eo	3	a 0 1	nu4	1630.85095	-12.8	0.256E+00	1647.81558	16.96335	1.0
	R Q	8	1 a	8	Eo	12	a 2 1	nu4	1630.88855	37.4	0.111E+00	2339.63141	708.74660	1.0
	R Q	12	3 a	12	A2o	8	a 4 1	nu4	1630.93282	99.8	0.505E-02	3131.68806	1500.76522	0.0
	R Q	9	0 s	9	A2o	7	s 1 1	nu4	1630.94690	39.2	0.880E-01	2519.44370	888.50072	1.0
* *	Q	13	1 a	13	Eo	20	* * *	**	n1631.09224	0.0	0.474E-03	3411.48837	1780.39613	0.0
	R Q	11	2 a	11	Ee	15	a 3 1	nu4	1631.11480	-16.0	0.525E-02	2916.08164	1284.96524	1.0
	R Q	10	2 s	10	Eo	14	s 3 1	nu4	1631.27703	23.8	0.223E-01	2701.22095	1069.94630	1.0
*	M P	10	9 a	9	A2o	4	s 5-1	nu4	c1631.39683	0.0	0.263E-04	2422.88602	791.48794	0.0
* *	Q	9	2 s	9	Ee	13	* * *	**	1631.41990	3.6	0.482E-01	2506.03598	874.61644	0.0
	P Q	2	1 s	2	Ee	4	s 0 1	nu4	1631.42932	-2.6	0.318E+00	1687.36830	55.93872	1.0
	Q Q	12	6 a	12	A2e	6	s 6 0	2nu2	1631.76597	41.5	0.429E-02	3037.32425	1405.56243	1.0
*	T Q	14	9 a	14	A2o	6	a12 0	2nu2	n1631.76650	0.0	0.874E-04	3403.50887	1771.74237	0.0
	Q P	12	10 s	11	Eo	10	a10 0	2nu2	c1631.84882	0.0	0.140E-03	2806.45688	1174.60806	0.0
	R Q	8	0 a	8	A2e	7	a 1 1	nu4	1631.88416	-63.1	0.199E+00	2344.24365	712.35318	1.0
	R Q	13	4 s	13	Eo	17	s 5 1	nu4	1631.89806	23.7	0.113E-02	3359.95098	1728.05529	0.0
	R Q	9	1 s	9	Ee	14	s 2 1	nu4	1631.96228	31.0	0.506E-01	2516.87476	884.91558	1.0
	P Q	2	1 a	2	Eo	4	a 0 1	nu4	1632.05725	1.6	0.285E+00	1688.76630	56.70921	1.0
	Q Q	14	8 a	14	Ee	12	s 8 0	2nu2	n1632.40447	0.0	0.232E-03	3464.14946	1831.74499	0.0
	Q Q	13	7 a	13	Eo	12	s 7 0	2nu2	1632.49020	-151.0	0.722E-03	3245.15807	1612.65277	1.0
*	M P	7	7 a	6	Eo	6	s 3-1	nu4	c1632.52695	0.0	0.190E-04	2007.63372	375.10677	0.0
* *	Q	12	1 s	12	Ee	18	* * *	**	n1632.54980	0.0	0.198E-02	3160.98317	1528.43337	0.0
* *	Q	9	1 a	9	Eo	14	* * *	**	1632.63320	60.6	0.507E-01	2517.99678	885.36964	1.0
* *	Q	10	3 a	10	A2o	7	* * *	**	1632.83120	10.1	0.341E-01	2685.38002	1052.54983	1.0
	R Q	12	3 s	12	A2e	9	s 4 1	nu4	1632.87350	-65.1	0.631E-02	3132.28406	1500.40405	1.0
	R Q	15	5 a	15	Eo	19	a 6 1	nu4	n1632.98343	0.0	0.918E-04	3889.59126	2256.60783	0.0
	P Q	3	1 s	3	Ee	6	s 0 1	nu4	1632.99915	10.9	0.262E+00	1748.53467	115.53661	1.0
*	Q Q	5	1 s	5	Ee	8	a 1-1	nu4	1633.01730	24.3	0.209E-02	1926.98313	293.96826	1.0
*	Q Q	6	1 a	6	Eo	10	s 1-1	nu4	1633.21450	-11.5	0.285E-03	2046.45343	413.23778	1.0
	R Q	11	2 s	11	Eo	16	s 3 1	nu4	1633.48188	38.7	0.851E-02	2918.08434	1284.60633	1.0
	R Q	14	4 a	14	Ee	18	a 5 1	nu4	1633.79112	-48.7	0.297E-03	3632.60272	1998.80673	1.0
*	Q Q	2	2 s	2	Eo	2	a 2 1	nu4	c1633.84230	0.0	0.123E-04	1678.63849	44.79598	0.0
*	N Q	3	3 s	3	A2e	1	s 0 0	2nu2	1633.88070	-29.6	0.129E-03	1719.74525	85.86159	0.0
	R Q	10	1 s	10	Ee	16	s 2 1	nu4	1633.88088	60.1	0.204E-01	2714.50173	1080.62686	1.0
*	U R	7	4 s	8	Eo	2	a 8 1	nu4	c1634.05248	0.0	0.590E-04	2130.08622	496.03508	0.0
	P Q	3	1 a	3	Eo	6	a 0 1	nu4	1634.06702	26.3	0.209E+00	1750.34266	116.27827	1.0
	R Q	15	5 s	15	Ee	19	s 6 1	nu4	n1634.10621	0.0	0.978E-04	3890.49318	2256.38697	0.0
*	P Q	9	2 s	9	Eo	13	s 1 0	2nu2	1634.29560	5.9	0.254E-03	2508.44530	874.15029	1.0
*	Q Q	4	2 a	4	Ee	6	s 2 1	nu4	c1634.36940	0.0	0.119E-04	1818.92497	184.55302	0.0
* *	Q	10	2 a	10	Ee	15	* * *	**	1634.40834	-28.5	0.167E-01	2704.76900	1070.35781	1.0
	R Q	13	3 a	13	A2o	9	a 4 1	nu4	1634.45460	-7.8	0.179E-02	3387.10358	1752.64820	1.0
	R Q	11	1 a	11	Eo	17	a 2 1	nu4	1634.53030	0.6	0.556E-02	2930.07564	1295.54540	1.0
	R Q	12	2 a	12	Ee	17	a 3 1	nu4	1634.72260	6.6	0.253E-02	3152.97220	1518.25026	1.0
	P Q	10	1 a	10	Eo	16	a 0 1	nu4	1634.83079	8.5	0.185E-01	2715.85766	1081.02772	1.0
*	T Q	13	9 a	13	A2o	5	a12 0	2nu2	n1634.87949	0.0	0.223E-04	3133.73608	1498.85659	0.0
	R Q	14	4 s	14	Eo	19	s 5 1	nu4	n1634.89681	0.0	0.321E-03	3633.45771	1998.56090	0.0
	Q Q	11	4 s	11	Ee	13	s 4 0	2nu2	1635.01173	-125.0	0.512E-02	2877.52928	1242.50505	1.0
*	M P	10	9 s	9	A2e	4	a 5-1	nu4	c1635.04258	0.0	0.439E-04	2425.72158	790.68053	0.0
*	Q Q	3	2 s	3	Eo	4	a 2 1	nu4	c1635.20822	0.0	0.124E-03	1739.63076	104.42207	0.0
	P Q	4	1 s	4	Ee	8	s 0 1	nu4	1635.27075	28.4	0.162E+00	1830.17422	194.90631	1.0
	R Q	11	0 s	11	A2o	9	s 1 1	nu4	1635.29280	410.7	0.177E-01	2933.97417	1298.72244	1.0
*	T R	5	2 s	6	Eo	2	s 5 0	2nu2	c1635.36297	0.0	0.480E-04	1918.29396	282.93714	0.0
	R Q	13	3 s	13	A2e	10	s 4 1	nu4	1635.42959	-108.6	0.202E-02	3387.87345	1752.43300	0.0
*	M P	7	7 s	6	Ee	7	a 3-1	nu4	1635.47027	9.7	0.325E-04	2009.71830	374.24900	1.0
	P Q	2	2 s	2	Eo	3	s 1-1	nu4	1635.47791	-7.2	0.228E+00	1680.27461	44.79598	1.0
* *	Q	15	2 s	15	Eo	22	* * *	**	n1635.52016	0.0	0.385E-04	3963.45843	2327.93827	0.0
	Q P	12	11 s	11	Ee	8	a11 0	2nu2	c1635.52766	0.0	0.987E-04	2732.96578	1097.43706	0.0
	R Q	12	0 a	12	A2e	10	a 1 1	nu4	1635.65179	-101.3	0.630E-02	3167.88839	1532.22647	1.0
*	S Q	9	0 s	9	A2o	8	a 2-1	nu4	1635.67030	-58.7	0.222E-01	2524.17689	888.50072	1.0
* *	Q	14	1 a	14	Eo	23	* * *	**	1635.68622	-1093.4	0.223E-03	3686.11570	2050.32014	0.0
	R Q	12	2 s	12	Eo	17	s 3 1	nu4	1635.77751	-86.6	0.274E-02	3153.72715	1517.94098	1.0
	Q Q	15	9 a	15	A2o	7	s 9 0	2nu2	n1635.80660	0.0	0.118E-03	3698.60349	2062.79689	0.0
* *	Q	15	0 s	15	A2o	12	* * *	**	n1635.83029	0.0	0.917E-04	3977.32657	2341.49628	0.0
*	Q Q	5	2 a	5	Ee	7	s 2 1	nu4	1635.86768	-49.2	0.161E-03	1919.48926	283.61666	1.0
	P Q	2	2 a	2	Ee	3	a 1-1	nu4	1635.91394	-15.9	0.209E+00	1681.50281	45.58728	1.0
*	R Q	12	2 s	12	Ee	18	s 3-1	nu4	c1635.92317	0.0	0.137E-03	3153.86733	1517.94098	0.0
*	U R	6	3 a	7	A2o	1	s 7 1	nu4	c1636.10222	0.0	0.224E-04	2020.08022	383.97745	0.0
* *	Q	11	1 s	11	Ee	18	* * *	**	n1636.23517	0.0	0.667E-02	2931.43094	1295.19577	0.0
*	R Q	11	1 s	11	Ee	16	a 3-1	nu4	c1636.43437	0.0	0.770E-04	2921.41309	1284.96524	0.0
* *	Q	13	1 s	13	Ee	20	* * *	**	n1636.59104	0.0	0.922E-03	3416.73063	1780.13959	0.0
*	Q Q	4	2 s	4	Eo	5	a 2 1	nu4	1636.64681	4.4	0.127E-03	1820.47545	183.82908	1.0
	P Q	3	2 s	3	Eo	5	s 1-1	nu4	1636.88680	-13.6	0.265E+00	1741.31023	104.42207	1.0
	P Q	4	1 a	4	Eo	7	a 0 1	nu4	1637.02893	50.3	0.109E+00	1832.63518	195.61128	1.0
* *	Q	10	0 a	10	A2e	9	* * *	**	1637.11850	-128.4	0.158E-01	2721.71254	1084.58120	1.0
	R Q	15	4 a	15	Ee	20	a 5 1	nu4	n1637.18314	0.0	0.792E-04	3924.51592	2287.33278	0.0
*	Q Q	6	1 s	6	Ee	10	a 1-1	nu4	1637.24520	26.7	0.148E-02	2049.86683	412.62430	1.0
*	Q Q	7	1 a	7	Eo	12	s 1-1	nu4	c1637.37795	0.0	0.361E-03	2188.69945	551.32034	0.0
	Q R	1	1 a	2	Eo	1	s 1 0	2nu2	1637.38989	7.7	0.726E-01	1654.35247	16.96335	1.0
*	Q Q	6	2 a	6	Ee	9	s 2 1	nu4	1637.39834	-2.4	0.498E-03	2039.67633	402.27775	1.0
	R Q	14	3 a	14	A2o	10	a 4 1	nu4	1637.47014	36.9	0.541E-03	3660.39863	2022.93218	1.0
	Q Q	12	5 a	12	Eo	14	s 5 0	2nu2	1637.51222	339.3	0.154E-02	3081.95488	1444.47659	1.0
	Q Q	11	3 a	11	A2o	8	s 3 0	2nu2	1637.61840	-203.1	0.823E-02	2904.92768	1267.28897	0.0
	R Q	12	1 a	12	Eo	20	a 2 1	nu4	1637.61840	-207.5	0.227E-02	3166.37382	1528.73467	0.0
	P Q	3	2 a	3	Ee	5	a 1-1	nu4	1637.61841	-1.7	0.229E+00	1742.80232	105.18374	1.0
	R Q	13	2 a	13	Ee	19	a 3 1	nu4	c1637.65708	0.0	0.842E-03	3407.68025	1770.01299	0.0
	R Q	15	4 s	15	Eo	21	s 5 1	nu4	n1637.93444	0.0	0.819E-04	3925.06297	2287.12853	0.0
	P Q	5	1 s	5	Ee	9	s 0 1	nu4	1638.31890	42.8	0.781E-01	1932.28288	293.96826	1.0
	R Q	14	3 s	14	A2e	11	s 4 1	nu4	1638.32424	118.6	0.539E-03	3660.92263	2022.61025	1.0
	R Q	13	2 s	13	Eo	19	s 3 1	nu4	c1638.34782	0.0	0.836E-03	3408.09388	1769.74967	0.0
*	N Q	5	3 s	5	A2e	3	s 0 0	2nu2	1638.63690	-3.9	0.102E-02	1903.15391	264.51662	1.0
	P Q	4	2 s	4	Eo	6	s 1-1	nu4	1638.86768	-8.3	0.210E+00	1822.69759	183.82908	1.0
* *	Q	11	2 a	11	Ee	17	* * *	**	n1638.94595	0.0	0.323E-02	2923.91119	1284.96524	0.0
*	Q Q	7	2 a	7	Ee	10	s 2 1	nu4	c1638.94769	0.0	0.791E-03	2179.37216	540.42168	0.0
* *	Q	15	1 a	15	Eo	25	* * *	**	n1639.08669	0.0	0.704E-04	3977.37479	2338.28810	0.0
	Q Q	11	1 a	11	Eo	19	s 1 0	2nu2	1639.17895	292.1	0.238E-02	2934.69514	1295.54540	1.0
	R Q	14	1 s	14	Ee	22	s 2 1	nu4	1639.35920	54.9	0.277E-03	3689.45806	2050.10435	1.0
	R Q	14	0 a	14	A2e	12	a 1 1	nu4	1639.40088	-55.8	0.580E-03	3693.14934	2053.74288	0.0
*	Q Q	6	2 s	6	Eo	9	a 2 1	nu4	c1639.41055	0.0	0.134E-03	2041.05933	401.64783	0.0
*	U R	10	6 a	11	A2e	2	s10 1	nu4	c1639.45166	0.0	0.168E-04	2595.10152	955.65077	0.0
	R Q	13	0 s	13	A2o	11	s 1 1	nu4	1639.55687	1029.4	0.175E-02	3423.05385	1783.59992	0.0
	Q Q	15	8 a	15	Ee	14	s 8 0	2nu2	n1639.67298	0.0	0.311E-04	3761.79325	2122.12027	0.0
	Q Q	13	6 a	13	A2e	7	s 6 0	2nu2	1639.69161	274.2	0.944E-03	3298.09124	1658.42705	1.0
*	T R	4	1 s	5	Ee	1	s 4 0	2nu2	c1639.83702	0.0	0.505E-04	1834.74695	194.90631	0.0
* *	Q	12	1 s	12	Ee	20	* * *	**	n1640.01625	0.0	0.120E-02	3168.44962	1528.43337	0.0
	P Q	4	2 a	4	Ee	7	a 1-1	nu4	1640.06799	22.3	0.165E+00	1824.61878	184.55302	1.0
*	M P	8	8 a	7	Ee	6	s 4-1	nu4	c1640.25006	0.0	0.122E-04	2118.39941	478.14866	0.0
	P Q	3	3 s	3	A2e	2	s 2-1	nu4	1640.35901	-4.6	0.343E+00	1726.22106	85.86159	1.0
*	P Q	10	2 s	10	Eo	15	s 1 0	2nu2	c1640.44527	0.0	0.871E-04	2710.39934	1069.94630	0.0
*	U R	6	3 s	7	A2e	2	a 7 1	nu4	c1640.48508	0.0	0.125E-03	2023.80070	383.31842	0.0
*	Q Q	8	2 a	8	Ee	12	s 2 1	nu4	1640.55460	-10.3	0.848E-03	2338.47264	697.91701	1.0
	R Q	14	2 a	14	Ee	21	a 3 1	nu4	n1640.61466	0.0	0.228E-03	3680.65801	2040.04335	0.0
	R Q	15	3 a	15	A2o	11	a 4 1	nu4	n1640.71598	0.0	0.133E-03	3951.80026	2311.08428	0.0
*	Q Q	7	2 s	7	Eo	11	a 2 1	nu4	c1640.78899	0.0	0.339E-03	2180.63260	539.84490	0.0
	P Q	3	3 a	3	A2o	2	a 2-1	nu4	1640.81360	-17.0	0.303E+00	1727.47311	86.65781	1.0
	P Q	5	1 a	5	Eo	9	a 0 1	nu4	1640.99243	57.1	0.443E-01	1935.61671	294.62999	1.0
* +	Q	15	2 s	15	Eo	23	a 8 0	2nu2	n1640.99564	0.0	0.201E-04	3968.93391	2327.93827	0.0
* *	Q	14	2 s	14	Eo	21	* * *	**	n1641.01506	0.0	0.127E-03	3680.83691	2039.82185	0.0
* *	Q	13	1 a	13	Eo	22	* * *	**	n1641.06522	0.0	0.525E-03	3421.46135	1780.39613	0.0
	R Q	15	3 s	15	A2e	12	a 4 1	nu4	n1641.10218	0.0	0.137E-03	3952.12730	2311.02512	0.0
	Q Q	14	7 a	14	Eo	14	s 7 0	2nu2	n1641.18694	0.0	0.143E-03	3525.50832	1884.32138	0.0
	P Q	5	2 s	5	Eo	8	s 1-1	nu4	1641.48718	-7.5	0.130E+00	1924.42507	282.93714	1.0
	Q Q	12	4 a	12	Ee	15	s 4 0	2nu2	1641.64127	421.5	0.109E-02	3117.77546	1476.17634	1.0
*	O Q	2	2 a	2	Ee	4	s 0 1	nu4	1641.77980	-12.2	0.163E-02	1687.36830	45.58728	1.0
	R Q	15	1 s	15	Ee	24	s 2 1	nu4	n1641.92188	0.0	0.701E-04	3980.03076	2338.10888	0.0
	P Q	6	1 s	6	Ee	11	s 0 1	nu4	c1642.15614	0.0	0.310E-01	2054.77613	412.62430	0.0
	P Q	4	3 s	4	A2e	2	s 2-1	nu4	1642.16514	-3.0	0.369E+00	1807.49652	165.33108	1.0
*	Q Q	8	2 s	8	Eo	12	a 2 1	nu4	c1642.23976	0.0	0.402E-03	2339.63141	697.39533	0.0
*	Q Q	9	2 a	9	Ee	14	s 2 1	nu4	c1642.26134	0.0	0.704E-03	2516.87476	874.61644	0.0
* +	Q	14	2 s	14	Eo	22	a 8 0	2nu2	n1642.27563	0.0	0.669E-04	3682.09748	2039.82185	0.0
*	Q Q	8	1 a	8	Eo	13	s 1-1	nu4	1642.27640	-17.8	0.323E-03	2351.02478	708.74660	1.0
*	Q Q	7	1 s	7	Ee	11	a 1-1	nu4	1642.39950	-13.6	0.976E-03	2193.15945	550.75859	1.0
*	M P	11	10 s	10	Eo	7	a 6-1	nu4	c1642.67821	0.0	0.102E-04	2580.63514	937.95823	0.0
* *	Q	12	2 a	12	Ee	18	* * *	**	n1642.73291	0.0	0.175E-04	3160.98317	1518.25026	0.0
	P Q	4	3 a	4	A2o	3	a 2-1	nu4	1642.99377	0.3	0.311E+00	1809.08163	166.08789	1.0
*	M P	8	8 s	7	Eo	7	a 4-1	nu4	c1643.27306	0.0	0.208E-04	2120.53549	477.26409	0.0
*	O Q	3	2 a	3	Ee	6	s 0 1	nu4	1643.35220	12.7	0.387E-02	1748.53467	105.18374	1.0
	P Q	5	2 a	5	Ee	8	a 1-1	nu4	1643.36987	34.0	0.903E-01	1926.98313	283.61666	1.0
*	U R	5	2 a	6	Ee	2	s 6 1	nu4	c1643.39719	0.0	0.114E-04	1927.01422	283.61666	0.0

*	T R	3	0 s	4	A2o	1	s 3 0	2nu2	1643.62108	-30.6	0.142E-03	1762.86198	119.23784	1.0
*	T R	11	7 s	12	Ee	4	s10 0	2nu2	c1643.75221	0.0	0.193E-04	2767.79311	1124.03568	0.0
*	* Q	9	2 s	9	Eo	14	* * *	**	1643.85190	54.1	0.325E-03	2517.99678	874.15029	1.0
*	O Q	2	2 s	2	Eo	4	a 0 1	nu4	1643.97070	3.8	0.117E-02	1688.76630	44.79598	1.0
*	* Q	15	2 a	15	Ee	23	* * *	**	n1643.99793	0.0	0.505E-04	3972.12018	2328.12225	0.0
*	Q Q	10	2 a	10	Ee	16	s 2 1	nu4	1644.15000	60.8	0.489E-03	2714.50173	1070.35781	1.0
	Q Q	12	3 a	12	A2o	9	s 3 0	2nu2	1644.38316	-421.8	0.154E-02	3145.19056	1500.76522	1.0
	P Q	5	3 s	5	A2e	4	s 2-1	nu4	1644.56445	7.0	0.271E+00	1909.08037	264.51662	1.0
	P Q	6	2 s	6	Eo	10	s 1-1	nu4	1644.80469	-9.1	0.652E-01	2046.45343	401.64783	1.0
	P Q	4	4 s	4	Eo	2	s 3-1	nu4	1645.09888	-1.5	0.118E+00	1784.45704	139.35801	1.0
	Q Q	13	5 a	13	Eo	16	s 5 0	2nu2	n1645.24633	0.0	0.303E-03	3342.20422	1696.95789	0.0
*	Q Q	11	2 s	11	Eo	17	a 2 1	nu4	c1645.46951	0.0	0.987E-04	2930.07564	1284.60633	0.0
	P Q	4	4 a	4	Ee	4	a 3-1	nu4	1645.57654	-17.3	0.101E+00	1785.74149	140.16322	1.0
*	O Q	4	2 a	4	Ee	8	s 0 1	nu4	1645.62350	23.0	0.518E-02	1830.17422	184.55302	1.0
	Q P	11	0 s	10	A2o	11	a 0 0	2nu2	c1645.74663	0.0	0.418E-03	2944.46772	1298.72244	0.0
	Q P	11	1 s	10	Ee	21	a 1 0	2nu2	1645.77510	-49.8	0.211E-03	2940.97585	1295.19577	1.0
	P Q	5	3 a	5	A2o	4	a 2-1	nu4	1645.81250	19.6	0.204E+00	1911.03716	265.22662	1.0
	Q P	11	2 s	10	Eo	21	a 2 0	2nu2	c1645.89396	0.0	0.215E-03	2930.49836	1284.60633	0.0
	P Q	6	1 a	6	Eo	11	a 0 1	nu4	1645.90330	37.2	0.148E-01	2059.13736	413.23778	1.0
*	Q Q	10	2 s	10	Eo	16	a 0 1	nu4	c1645.91193	0.0	0.184E-03	2715.85766	1069.94630	0.0
	Q Q	12	2 a	12	Ee	19	s 2 0	2nu2	n1645.92305	0.0	0.337E-03	3164.17331	1518.25026	0.0
*	O Q	3	2 s	3	Eo	6	a 0 1	nu4	1645.92330	27.1	0.279E-02	1750.34266	104.42207	1.0
	Q P	11	3 s	10	A2e	10	a 3 0	2nu2	c1646.09607	0.0	0.447E-03	2913.03160	1266.93735	0.0
*	S Q	14	1 a	14	Eo	24	s 3-1	nu4	n1646.14760	0.0	0.662E-04	3696.46774	2050.32014	0.0
*	N Q	7	3 s	7	A2e	5	s 0 0	2nu2	1646.16140	32.6	0.159E-02	2167.78007	521.62193	1.0
*	S R	1	0 s	2	A2o	1	a 2-1	nu4	1646.40570	-16.7	0.383E-02	1666.29726	19.88989	1.0
*	U R	9	5 a	10	Eo	3	s 9 1	nu4	c1646.44103	0.0	0.139E-04	2445.37497	798.93483	0.0
	Q P	11	4 s	10	Eo	20	a 4 0	2nu2	c1646.45566	0.0	0.234E-03	2888.56220	1242.10653	0.0
*	* Q	11	2 a	11	Ee	18	* * *	**	n1646.46570	0.0	0.297E-03	2931.43094	1284.96524	0.0
*	S R	2	1 a	3	Eo	1	s 3-1	nu4	1646.46896	-35.1	0.255E-02	1703.18168	56.70921	1.0
	R R	0	0 a	1	A2e	2	a 1 1	nu4	1646.49109	6.9	0.727E+00	1647.28380	0.79340	1.0
	Q Q	12	1 a	12	Eo	21	s 1 0	2nu2	n1646.61946	0.0	0.161E-03	3175.35413	1528.73467	0.0
	P Q	7	1 s	7	Ee	12	s 0 1	nu4	1646.74207	27.7	0.106E-01	2197.49789	550.75859	1.0
*	R R	2	1 s	3	Ee	1	s 2 0	2nu2	c1646.76985	0.0	0.121E-04	1702.70943	55.93872	0.0
*	* Q	13	1 s	13	Ee	22	* * *	**	n1646.80558	0.0	0.709E-04	3426.94517	1780.13959	0.0
*	U R	5	2 s	6	Eo	3	a 6 1	nu4	c1646.97730	0.0	0.548E-04	1929.91176	282.93714	0.0
	Q P	11	5 s	10	Ee	20	a 5 0	2nu2	1647.00448	-4.0	0.247E-03	2857.08587	1210.08099	1.0
*	* Q	15	0 s	15	A2o	13	* * *	**	n1647.13666	0.0	0.591E-04	3988.63294	2341.49628	0.0
*	* Q	15	2 s	15	Eo	24	* * *	**	n1647.17962	0.0	0.172E-04	3975.11789	2327.93827	0.0
	P Q	5	4 s	5	Eo	4	s 3-1	nu4	1647.30933	0.4	0.117E+00	1885.96189	238.65260	1.0
	P Q	6	3 s	6	A2e	4	s 2-1	nu4	1647.44116	10.2	0.150E+00	2030.75856	383.31842	1.0
	P Q	6	2 a	6	Ee	10	a 1-1	nu4	1647.59204	29.6	0.387E-01	2049.86683	402.27775	1.0
	Q P	11	6 s	10	A2o	10	a 6 0	2nu2	1647.83076	-1.7	0.520E-03	2818.59177	1170.76084	1.0
*	M P	9	9 a	8	A2o	3	s 5-1	nu4	c1647.83233	0.0	0.146E-04	2241.33686	593.50306	0.0
*	Q Q	9	1 a	9	Eo	16	s 1-1	nu4	1647.86760	-29.9	0.224E-03	2533.24023	885.36964	1.0
	P Q	5	4 a	5	Ee	5	a 3-1	nu4	1648.16602	1.6	0.941E-01	1887.57409	239.40823	1.0
*	S R	3	2 a	4	Ee	2	s 4-1	nu4	1648.26980	15.1	0.428E-02	1753.45203	105.18374	1.0
*	S R	2	1 s	3	Ee	2	a 3-1	nu4	1648.30490	-56.0	0.270E-02	1704.24922	55.93872	1.0
	Q Q	14	6 a	14	A2e	8	s 6 0	2nu2	1648.31033	-36.0	0.171E-03	3577.92774	1929.61381	1.0
*	Q Q	12	2 s	12	Eo	20	a 2 1	nu4	n1648.43284	0.0	0.528E-04	3166.37382	1517.94098	0.0
*	O Q	8	1 a	8	Ee	13	a 1-1	nu4	1648.43677	-38.4	0.580E-03	2356.67909	708.23848	1.0
*	O Q	5	2 a	5	Ee	9	s 0 1	nu4	1648.67050	42.8	0.490E-02	1932.28288	283.61666	1.0
*	O Q	4	2 s	4	Eo	7	a 0 1	nu4	1648.81080	47.0	0.374E-02	1832.63518	183.82908	1.0
	P Q	7	2 s	7	Eo	12	s 1-1	nu4	1648.85315	-14.0	0.271E-01	2188.69945	539.84490	1.0
	Q P	11	7 s	10	Ee	19	a 7 0	2nu2	c1649.03883	0.0	0.271E-03	2773.07381	1124.03568	0.0
*	S Q	12	0 a	12	A2e	11	s 2-1	nu4	c1649.05720	0.0	0.970E-04	3181.28151	1532.22647	0.0
	Q Q	13	4 a	13	Ee	17	s 4 0	2nu2	n1649.33257	0.0	0.185E-03	3377.68015	1728.34758	0.0
	P Q	6	3 a	6	A2o	4	a 2-1	nu4	1649.55807	19.7	0.107E+00	2033.53355	383.97745	1.0
	P Q	5	5 s	5	Ee	3	s 4-1	nu4	1649.71399	1.5	0.752E-01	1854.98294	205.26910	1.0
*	T R	10	6 s	11	A2o	3	s 9 0	2nu2	c1649.73081	0.0	0.728E-04	2604.84150	955.10643	0.0
*	S R	4	3 a	5	A2o	1	s 5-1	nu4	1649.93708	22.5	0.110E-01	1816.02272	166.08789	1.0
	Q Q	15	7 a	15	Eo	16	s 7 0	2nu2	n1649.95326	0.0	0.225E-04	3824.06139	2174.10813	0.0
	P Q	6	4 s	6	Eo	6	s 3-1	nu4	1650.04932	-2.2	0.775E-01	2007.63372	357.58418	1.0
*	S R	3	2 s	4	Eo	1	a 4-1	nu4	1650.09450	-38.3	0.448E-02	1754.52040	104.42207	1.0
*	P Q	11	2 s	11	Eo	19	s 1 0	2nu2	c1650.11802	0.0	0.372E-04	2934.69514	1284.60633	0.0
	P Q	5	5 a	5	Eo	3	a 4-1	nu4	1650.19897	-16.4	0.620E-01	1856.28804	206.08743	1.0
*	* Q	12	2 a	12	Ee	20	* * *	**	n1650.47936	0.0	0.130E-03	3168.44962	1518.25026	0.0
	Q P	11	8 s	10	Eo	17	a 8 0	2nu2	1650.76120	7.4	0.272E-03	2720.53194	1069.77148	1.0
*	M P	9	9 s	8	A2e	4	a 5-1	nu4	c1650.92858	0.0	0.247E-04	2243.51303	592.58650	0.0
*	T Q	15	8 a	15	Ee	15	a11 0	2nu2	n1651.09241	0.0	0.123E-04	3773.21268	2122.12027	0.0
	P Q	7	3 s	7	A2e	6	s 2-1	nu4	1651.19287	38.5	0.718E-01	2172.81095	521.62193	1.0
	P Q	6	4 a	6	Ee	7	a 3-1	nu4	1651.43530	14.9	0.572E-01	2009.71830	358.28449	1.0
*	S R	5	4 a	6	Ee	1	s 6-1	nu4	1651.47110	23.0	0.593E-02	1890.87703	239.40823	1.0
	Q Q	13	3 a	13	A2o	10	s 3 0	2nu2	c1651.62454	0.0	0.155E-03	3404.26861	1752.64820	0.0
	P Q	7	1 a	7	Eo	13	a 0 1	nu4	1651.66820	-4.7	0.423E-02	2202.98901	551.32034	1.0
*	* Q	13	2 s	13	Eo	22	* * *	**	n1651.71168	0.0	0.177E-04	3421.46135	1769.74967	0.0
*	S R	4	3 s	5	A2e	1	a 5-1	nu4	1651.76249	-37.5	0.114E-01	1817.09732	165.33108	1.0
	P Q	8	1 s	8	Ee	14	s 0 1	nu4	1652.01300	8.9	0.321E-02	2360.25059	708.23848	1.0
	P Q	6	5 s	6	Ee	5	s 4-1	nu4	1652.29260	-0.1	0.677E-01	1976.66152	324.36891	1.0
*	O Q	6	2 a	6	Ee	11	s 0 1	nu4	1652.50160	32.2	0.362E-02	2054.77613	402.27775	1.0
*	O Q	5	2 s	5	Eo	9	a 0 1	nu4	1652.68440	48.3	0.361E-02	1935.61671	282.93714	1.0
	P Q	7	2 a	7	Ee	11	a 1-1	nu4	1652.73800	2.3	0.135E-01	2193.15945	540.42168	1.0
*	S R	6	5 a	7	Eo	2	s 7-1	nu4	1652.87040	36.4	0.557E-02	1977.99395	325.12719	1.0
	Q P	11	9 s	10	A2e	6	a 9 0	2nu2	c1653.16816	0.0	0.501E-03	2660.97605	1007.80842	0.0
	P Q	6	5 a	6	Eo	5	a 4-1	nu4	1653.18530	2.4	0.523E-01	1978.31225	325.12719	1.0
*	U R	8	4 a	9	Ee	4	s 8 1	nu4	c1653.30191	0.0	0.209E-04	2307.75139	654.45027	0.0
*	S R	5	4 s	6	Eo	1	a 6-1	nu4	1653.30700	-35.9	0.612E-02	1891.96319	238.65260	1.0
	P Q	7	4 s	7	Eo	8	s 3-1	nu4	1653.35559	2.4	0.401E-01	2149.39043	496.03508	1.0
*	T R	7	3 s	8	A2e	2	s 6 0	2nu2	c1653.54000	0.0	0.379E-04	2175.16330	521.62193	0.0
*	U R	4	1 s	5	Ee	2	a 5 1	nu4	c1653.56300	0.0	0.391E-04	1848.46695	194.90631	0.0
	P Q	8	2 s	8	Eo	13	s 1-1	nu4	1653.62755	-19.0	0.944E-02	2351.02478	697.39533	1.0
	P Q	7	3 a	7	A2o	5	a 2-1	nu4	1653.78735	27.6	0.359E-01	2176.00752	522.22293	1.0
	Q Q	14	5 a	14	Eo	18	s 5 0	2nu2	n1653.86402	0.0	0.491E-04	3621.60649	1967.74247	0.0
*	Q Q	10	1 a	10	Eo	18	s 1-1	nu4	c1654.09062	0.0	0.128E-03	2735.11953	1081.02772	0.0
*	S R	7	6 a	8	A2e	1	s 8-1	nu4	1654.13000	45.1	0.933E-02	2077.34830	423.22281	1.0
	P Q	6	6 s	6	A2o	1	s 5-1	nu4	1654.20825	4.1	0.891E-01	1937.78219	283.57435	1.0
	Q Q	13	2 a	13	Ee	21	s 2 0	2nu2	n1654.40529	0.0	0.469E-04	3424.41828	1770.01299	0.0
	P Q	6	6 a	6	A2e	2	a 5-1	nu4	1654.69458	-17.4	0.706E-01	1939.10645	284.41013	1.0
*	S R	6	5 s	7	Ee	1	a 7-1	nu4	1654.72340	-47.0	0.572E-02	1979.09701	324.36891	1.0
	P Q	8	3 s	8	A2e	6	s 2-1	nu4	1655.01807	29.3	0.227E-01	2334.30300	679.28786	1.0
*	S R	8	7 a	9	Eo	1	s 9-1	nu4	1655.24610	43.0	0.354E-02	2188.91078	533.66898	1.0
*	Q Q	9	1 s	9	Ee	15	a 1-1	nu4	1655.27730	-56.3	0.297E-03	2540.19851	884.91558	1.0
	Q Q	13	1 a	13	Eo	23	s 1 0	2nu2	n1655.27941	0.0	0.163E-04	3435.67554	1780.39613	0.0
	P Q	7	5 s	7	Ee	6	s 4-1	nu4	1655.38562	-7.5	0.405E-01	2118.39941	463.01304	1.0
*	T R	9	5 s	10	Ee	5	s 8 0	2nu2	c1655.39038	0.0	0.622E-04	2453.76820	798.37451	0.0
	P Q	7	4 a	7	Ee	8	a 3-1	nu4	1655.44885	15.2	0.262E-01	2152.12347	496.67614	1.0
*	S R	7	6 s	8	A2o	1	a 8-1	nu4	1656.01196	-36.1	0.956E-02	2078.47368	422.45811	1.0
*	S R	9	8 a	10	Ee	2	s10-1	nu4	1656.21800	54.5	0.245E-02	2312.64800	656.43545	1.0
	Q P	11	10 s	10	Eo	8	a10 0	2nu2	c1656.47061	0.0	0.178E-03	2594.43018	937.95823	0.0
*	N Q	9	3 s	9	A2e	7	s 0 0	2nu2	1656.68180	17.3	0.994E-03	2512.85889	856.17882	1.0
	P Q	7	5 a	7	Eo	7	a 4-1	nu4	1656.82996	14.8	0.286E-01	2120.53549	463.70701	1.0
*	* Q	13	2 a	13	Ee	22	* * *	**	n1656.93218	0.0	0.226E-04	3426.94517	1770.01299	0.0
*	S R	10	9 a	11	A2o	1	s11-1	nu4	1657.03910	44.7	0.313E-02	2448.52257	791.48794	1.0
*	O Q	7	2 a	7	Ee	12	s 0 1	nu4	1657.07910	28.9	0.223E-02	2197.49789	540.42168	1.0
	Q R	2	2 a	3	Ee	1	s 2 0	2nu2	1657.12100	-11.5	0.964E-01	1702.70943	45.58728	1.0
	P Q	7	6 s	7	A2o	2	s 5-1	nu4	1657.13230	-8.0	0.723E-01	2079.59121	422.45811	1.0
*	S R	8	7 s	9	Ee	1	a 9-1	nu4	1657.16731	-26.4	0.362E-02	2190.06398	532.89403	1.0
	P Q	8	4 s	8	Eo	9	s 3-1	nu4	1657.25244	6.9	0.168E-01	2311.12235	653.87060	1.0
	Q Q	15	6 a	15	A2e	9	s 6 0	2nu2	n1657.43006	0.0	0.255E-04	3876.32854	2218.89848	0.0
*	O Q	6	2 s	6	Eo	11	a 0 1	nu4	1657.49330	37.7	0.280E-02	2059.13736	401.64783	1.0
*	N Q	4	4 s	4	Eo	3	s 1 0	2nu2	1657.62341	-26.2	0.838E-04	1796.98404	139.35801	1.0
*	S R	11	10 a	12	Ee	1	s12-1	nu4	1657.70930	43.9	0.921E-03	2596.49313	938.78822	1.0
	P Q	9	1 s	9	Ee	16	s 0 1	nu4	1657.90160	-19.9	0.902E-03	2542.81917	884.91558	1.0
	Q Q	14	4 a	14	Ee	19	s 4 0	2nu2	n1657.93656	0.0	0.257E-04	3656.74329	1998.80673	0.0
	P Q	7	6 a	7	A2e	3	a 5-1	nu4	1658.05078	5.3	0.533E-01	2081.27306	423.22281	1.0
*	S R	9	8 s	10	Eo	1	a10-1	nu4	1658.18470	-37.2	0.250E-02	2313.83474	655.64632	1.0
	P Q	8	1 a	8	Eo	15	a 0 1	nu4	1658.19070	-140.9	0.104E-02	2366.95139	708.74660	0.0
*	S R	12	11 a	13	Eo	2	s13-1	nu4	1658.22290	26.4	0.503E-03	2756.51444	1098.29418	1.0
*	T R	6	2 s	7	Eo	4	s 5 0	2nu2	c1658.43443	0.0	0.394E-04	2060.08568	401.64783	0.0
*	S R	13	12 a	14	A2e	1	s14-1	nu4	1658.58848	110.3	0.510E-03	2928.53742	1269.95997	0.0
	P Q	7	7 s	7	Ee	2	s 6-1	nu4	1658.58887	6.3	0.245E-01	2032.83724	374.24900	1.0
*	S R	14	13 a	15	Eo	1	s15-1	nu4	1658.76695	-61.6	0.121E-03	3112.50914	1453.73603	1.0
	P Q	8	2 a	8	Ee	13	a 1-1	nu4	1658.76715	50.7	0.390E-02	2356.67909	697.91701	0.0
	Q R	2	1 a	3	Eo	2	s 1 0	2nu2	1658.76758	-16.9	0.113E+00	1715.47848	56.70921	1.0
*	O Q	3	3 a	3	A2o	3	s 1 1	nu4	1658.93190	-49.8	0.431E-02	1745.59469	86.65781	1.0
	P Q	8	5 s	8	Ee	8	s 4-1	nu4	1659.02283	2.4	0.189E-01	2280.08814	621.06555	1.0
	P Q	7	7 a	7	Eo	3	a 6-1	nu4	1659.07250	-15.5	0.186E-01	2034.18082	375.10677	1.0
*	S R	10	9 s	11	A2e	1	a11-1	nu4	1659.07280	45.3	0.319E-02	2449.74880	790.68053	0.0
	P Q	9	2 s	9	Eo	16	s 1-1	nu4	c1659.08725	0.0	0.281E-02	2533.24023	874.15029	0.0
	Q R	2	0 a	3	A2e	1	s 0 0	2nu2	1659.33008	-21.6	0.231E+00	1719.74525	60.41301	1.0
	P Q	8	3 a	8	A2o	6	a 2-1	nu4	1659.50928	-24.5	0.140E-01	2339.34844	679.83671	1.0
*	S R	11	10 s	12	Eo	1	a12-1	nu4	1659.80570	-12.2	0.938E-03	2597.76515	937.95823	1.0
*	U R	7	3 a	8	A2o	2	s 7 1	nu4	1660.05030	16.1	0.561E-04	2182.27162	522.22293	1.0
*	N Q	5	4 s	5	Eo	5	s 1 0	2nu2	c1660.19287	0.0	0.209E-03	1898.84702	238.65260	0.0
*	U R	3	0 s	4	A2o	2	a 4 1	nu4	c1660.22089	0.0	0.844E-04	1779.45716	119.23784	0.0
	P Q	8	4 a	8	Ee	10	a 3-1	nu4	1660.25085	3.6	0.928E-02	2314.70076	654.45027	1.0
*	O Q	5	3 a	5	A2o	5	s 1 1	nu4	1660.35427	-63.4	0.140E-01	1925.58723	265.22662	1.0
*	S R	12	11 s	13	Ee	1	a13-1	nu4	1660.40250	5.7	0.511E-03	2757.83899	1097.43706	1.0
	P Q	9	3 s	9	A2e	8	s 2-1	nu4	1660.55600	45.9	0.847E-02	2516.73023	856.17882	0.0
	P Q	8	6 s	8	A2o	3	s 5-1	nu4	1660.55603	-12.0	0.389E-01	2241.33686	580.77963	0.0
*	U R	8	4 s	9	Eo	4	a 8 1	nu4	c1660.82456	0.0	0.944E-04	2314.69664	653.87060	0.0
*	S R	13	12 s	14	A2o	1	a14-1	nu4	1660.85738	64.7	0.519E-03	2929.92175	1269.07084	1.0
*	Q Q	11	1 a	11	Eo	20	s 1-1	nu4	c1660.87304	0.0	0.626E-04	2956.41333	1295.54540	0.0
	R R	1	1 s	2	Ee	2	s 2 1	nu4	1661.12476	-10.0	0.501E+00	1677.29875	16.17299	1.0
*	S R	14	13 s	15	Ee	1	a15-1	nu4	c1661.15545	0.0	0.123E-03	3113.96118	1452.80963	0.0
	P Q	8	5 a	8	Eo	8	a 4-1	nu4	1661.18726	12.7	0.117E-01	2282.87892	621.69293	1.0
	Q Q	14	3 a	14	A2o	11	s 3 0	2nu2	n1661.27987	0.0	0.322E-04	3684.21205	2022.93218	0.0
*	O Q	4	3 s	4	A2e	3	a 1 1	nu4	1661.28480	-57.2	0.893E-02	1826.62160	165.33108	1.0
	R R	1	1 a	2	Eo	2	a 2 1	nu4	1661.67493	-2.1	0.457E+00	1678.63849	16.96335	1.0
	P Q	9	4 s	9	Eo	11	s 3-1	nu4	1661.74240	11.2	0.576E-02	2492.68147	830.94019	1.0
	P Q	8	7 s	8	Ee	4	s 6-1	nu4	1661.83704	-14.4	0.179E-01	2194.73251	532.89403	1.0
	P Q	8	6 a	8	A2e	4	a 5-1	nu4	1662.04395	16.7	0.258E-01	2243.51303	581.47075	1.0
*	O Q	8	2 a	8	Ee	14	s 0 1	nu4	1662.33480	12.2	0.120E-02	2360.25059	697.91701	1.0
*	O Q	7	3 a	7	A2o	6	s 1 1	nu4	1662.47927	-51.0	0.144E-01	2184.70730	522.22293	1.0
*	T R	5	1 s	6	Ee	3	s 4 0	2nu2	c1662.56593	0.0	0.589E-04	1956.53845	293.96826	0.0
*	O Q	6	3 s	6	A2e	5	a 1 1	nu4	1662.76030	-65.7	0.138E-01	2046.08529	383.31842	1.0
	P Q	8	7 a	8	Eo	4	a 6-1	nu4	1662.77300	5.3	0.124E-01	2196.44145	533.66898	1.0
*	O Q	9	3 a	9	A2o	7	s 1 1	nu4	c1662.78955	0.0	0.925E-04	2519.44370	856.65843	0.0
*	Q Q	10	1 s	10	Ee	17	a 1-1	nu4	1662.81044	-149.6	0.116E-03	2743.45226	1080.62686	0.0
	P Q	8	8 s	8	Eo	3	s 7-1	nu4	1662.86401	18.1	0.126E-01	2140.12629	477.26409	1.0
*	O Q	7	2 s	7	Eo	13	a 0 1	nu4	1663.14360	-5.1	0.185E-02	2202.98901	539.84490	1.0
*	O Q	10	3 s	10	A2e	8	a 1 1	nu4	c1663.19799	0.0	0.124E-03	2715.30247	1052.10640	0.0
	P Q	9	5 s	9	Ee	10	s 4-1	nu4	1663.21936	2.9	0.713E-02	2461.59358	798.37451	1.0
*	Q R	1	1 a	2	Eo	3	s 1-1	nu4	1663.30920	-20.6	0.891E-03	1680.27461	16.96335	0.0
	P Q	8	8 a	8	Ee	3	a 7-1	nu4	1663.34082	-11.3	0.901E-02	2141.49061	478.14866	1.0
*	N Q	6	4 s	6	Eo	7	s 1 0	2nu2	1663.43365	4.9	0.296E-03	2021.01734	357.58418	1.0
	P Q	10	1 s	10	Ee	18	s 0 1	nu4	1664.36120	-81.8	0.263E-03	2744.99624	1080.62686	1.0
	P Q	9	6 s	9	A2o	4	s 5-1	nu4	1664.49951	-12.5	0.162E-01	2422.88602	758.38526	1.0
*	O Q	8	3 s	8	A2e	7	a 1 1	nu4	1664.94970	-60.9	0.101E-01	2344.24365	679.28786	1.0
	P Q	10	2 s	10	Eo	18	s 1-1	nu4	1665.17220	-10.3	0.720E-03	2735.11953	1069.94630	1.0
*	Q R	1	1 s	2	Ee	3	a 1-1	nu4	1665.32800	-18.2	0.840E-03	1681.50281	16.17299	1.0
*	O Q	4	3 a	4	A2o	4	s 1 1	nu4	1665.35030	60.2	0.719E-02	1831.43217	166.08789	1.0
	P Q	9	1 a	9	Eo	17	a 0 1	nu4	1665.42679	-80.4	0.217E-03	2550.80447	885.36964	1.0
*	U R	11	6 a	12	A2e	3	s10 1	nu4	c1665.52947	0.0	0.160E-04	2836.76403	1171.23532	0.0
	P Q	9	7 s	9	Ee	6	s 6-1	nu4	1665.56970	-4.0	0.857E-02	2376.42640	710.85630	1.0
	P Q	9	2 a	9	Ee	15	a 1-1	nu4	1665.57710	-49.7	0.978E-03	2540.19851	874.61644	1.0
*	O Q	3	3 s	3	A2e	3	a 1 1	nu4	1665.58980	67.9	0.315E-02	1751.44460	85.86159	1.0
*	S R	2	0 a	3	A2e	2	s 2-1	nu4	1665.80710	-9.5	0.851E-02	1726.22106	60.41301	1.0
	P Q	9	4 a	9	Ee	12	a 3-1	nu4	1665.84460	-15.7	0.246E-02	2497.30418	831.45801	1.0
*	U R	7	3 s	8	A2e	3	a 7 1	nu4	1666.16624	9.5	0.249E-03	2187.78722	521.62193	1.0
	P Q	9	5 a	9	Eo	10	a 4-1	nu4	1666.29600	-7.1	0.365E-02	2465.23154	798.93483	1.0
	P Q	9	8 s	9	Eo	5	s 7-1	nu4	1666.41500	-13.7	0.817E-02	2322.06269	655.64632	1.0
*	U R	6	2 a	7	Ee	3	s 6 1	nu4	c1666.69579	0.0	0.331E-04	2068.97237	402.27775	0.0
	P Q	9	6 a	9	A2e	4	a 5-1	nu4	1666.72095	17.0	0.927E-02	2425.72158	759.00233	1.0
*	O Q	11	3 a	11	A2o	9	s 1 1	nu4	c1666.72627	0.0	0.802E-03	2933.97417	1267.28897	0.0
	P Q	10	4 s	10	Eo	13	s 3-1	nu4	1666.79090	20.9	0.158E-02	2693.86729	1027.07848	1.0
	P Q	9	9 s	9	A2e	1	s 8-1	nu4	1667.03760	7.1	0.120E-01	2259.62339	592.58650	1.0
	P Q	9	7 a	9	Eo	6	a 6-1	nu4	1667.08948	13.9	0.529E-02	2378.63605	711.54796	1.0
	R R	1	0 s	2	A2o	2	s 1 1	nu4	1667.34094	20.9	0.913E+00	1687.22874	19.88989	1.0
*	N Q	7	4 s	7	Eo	9	s 1 0	2nu2	c1667.35673	0.0	0.307E-03	2163.38989	496.03508	0.0
	P Q	9	8 a	9	Ee	5	a 7-1	nu4	1667.36300	11.5	0.530E-02	2323.79730	656.43545	1.0
*	O Q	12	3 s	12	A2e	10	a 1 1	nu4	c1667.47421	0.0	0.170E-03	3167.88839	1500.40405	0.0
	P Q	9	9 a	9	A2o	2	a 8-1	nu4	1667.51030	25.1	0.803E-02	2261.01085	593.50306	0.0
	P Q	9	3 a	9	A2o	8	a 2-1	nu4	1667.51050	-79.6	0.673E-02	2524.17689	856.65843	0.0
*	S Q	13	0 s	13	A2o	12	a 2-1	nu4	c1667.74639	0.0	0.170E-04	3451.35746	1783.59992	0.0
	Q P	10	1 s	9	Ee	19	a 1 0	2nu2	1667.80070	-3.2	0.440E-03	2748.42788	1080.62686	1.0
	P Q	10	5 s	10	Ee	12	s 4-1	nu4	1667.97732	14.0	0.219E-02	2662.74905	994.77313	1.0
	Q P	10	2 s	9	Eo	19	a 2 0	2nu2	c1667.98176	0.0	0.447E-03	2737.92845	1069.94630	0.0
*	Q Q	12	1 a	12	Eo	22	s 1-1	nu4	c1668.14159	0.0	0.267E-04	3196.85891	1528.73467	0.0
*	S R	3	1 a	4	Eo	2	s 3-1	nu4	1668.17900	2.3	0.463E-02	1784.45704	116.27827	1.0
*	O Q	9	2 a	9	Ee	16	s 0 1	nu4	1668.19990	-28.3	0.563E-03	2542.81917	874.61644	1.0
	Q P	10	3 s	9	A2e	10	a 3 0	2nu2	1668.31470	-25.8	0.918E-03	2720.42368	1052.10640	1.0
*	R R	3	1 s	4	Ee	3	s 2 0	2nu2	1668.61753	20.8	0.328E-04	1784.15206	115.53661	1.0
	Q P	10	4 s	9	Eo	18	a 4 0	2nu2	1668.83110	-10.5	0.473E-03	2695.91063	1027.07848	1.0
	P Q	10	6 s	10	A2o	5	s 5-1	nu4	1668.97404	-9.0	0.542E-02	2624.08137	955.10643	1.0
*	O Q	8	2 s	8	Eo	15	a 0 1	nu4	1669.55060	-54.6	0.108E-02	2366.95139	697.39533	1.0

*	* Q	10	3 s	10	A2e	9	* * *	**	1669.59340	-127.4	0.389E-02	2721.71254	1052.10640	1.0
	Q P	10	5 s	9	Ee	18	a 5 0	2nu2	c1669.60532	0.0	0.487E-03	2664.37949	994.77313	0.0
	P Q	10	7 s	10	Ee	8	s 6-1	nu4	1669.79560	-20.3	0.316E-02	2577.76266	907.96503	1.0
*	N Q	11	3 s	11	A2e	9	s 0 0	2nu2	1669.98053	-2.7	0.314E-03	2936.91815	1266.93735	1.0
*	S R	3	1 s	4	Ee	4	a 3-1	nu4	1670.20320	-16.8	0.485E-02	1785.74149	115.53661	1.0
*	O Q	13	3 a	13	A2o	11	s 1 1	nu4	n1670.40565	0.0	0.178E-03	3423.05385	1752.64820	0.0
	P Q	10	8 a	10	Eo	6	s 7-1	nu4	1670.42978	-31.9	0.347E-02	2523.64417	853.21120	1.0
*	S R	4	2 a	5	Ee	3	s 4-1	nu4	1670.43020	2.8	0.650E-02	1854.98294	184.55302	1.0
*	P Q	8	4 s	8	Eo	10	s 3 1	nu4	c1670.45620	0.0	0.140E-04	2324.33065	653.87060	0.0
*	O Q	14	3 s	14	A2e	12	a 1 1	nu4	n1670.53909	0.0	0.393E-04	3693.14934	2022.61025	0.0
	Q P	10	6 s	9	A2o	9	a 6 0	2nu2	1670.71840	-11.8	0.989E-03	2625.82601	955.10643	1.0
	P Q	10	9 s	10	A2e	2	s 8-1	nu4	1670.87311	-12.1	0.691E-02	2461.55485	790.68053	1.0
	P Q	10	10 s	10	Eo	2	s 9-1	nu4	1671.12100	16.2	0.264E-02	2391.29848	720.17910	1.0
	P R	1	1 s	2	Eo	4	s 0 1	nu4	1671.19507	-2.4	0.967E-01	1687.36830	16.17299	1.0
*	U R	6	2 s	7	Eo	5	a 6 1	nu4	c1671.56609	0.0	0.138E-03	2073.21284	401.64783	0.0
	P Q	10	10 a	10	Ee	3	a 9-1	nu4	1671.57478	-43.3	0.163E-02	2392.71235	721.13324	0.0
*	* Q	11	1 s	11	Ee	20	* * *	**	n1671.58972	0.0	0.115E-03	2966.78549	1295.19577	0.0
*	U R	10	5 a	11	Eo	5	s 9 1	nu4	c1671.79999	0.0	0.149E-04	2667.06641	995.26756	0.0
	P R	1	1 a	2	Eo	4	a 0 1	nu4	1671.80310	1.5	0.944E-01	1688.76630	16.96335	1.0
	P Q	11	2 s	11	Eo	20	s 1-1	nu4	c1671.81211	0.0	0.158E-03	2956.41333	1284.60633	0.0
	P Q	10	9 a	10	A2o	3	a 8-1	nu4	1671.83000	21.7	0.410E-02	2463.31577	791.48794	1.0
	P Q	10	8 a	10	Ee	7	a 7-1	nu4	1671.97950	17.3	0.195E-02	2525.88453	853.90676	1.0
	P Q	10	7 a	10	Eo	7	a 6-1	nu4	1672.06125	10.7	0.163E-02	2580.63514	908.57496	1.0
	P Q	10	6 a	10	A2e	5	a 5-1	nu4	1672.11400	-3.0	0.248E-02	2627.76507	955.65077	1.0
*	N Q	8	4 s	8	Eo	11	s 1 0	2nu2	c1672.16212	0.0	0.276E-03	2326.02586	653.87060	0.0
	P Q	10	4 a	10	Ee	14	a 3-1	nu4	1672.16548	7.3	0.426E-03	2699.70024	1027.53549	0.0
	P Q	10	5 a	10	Eo	12	a 4-1	nu4	1672.16550	-55.9	0.839E-03	2667.43865	995.26756	0.0
	Q P	10	7 s	9	Ee	17	a 7 0	2nu2	c1672.28269	0.0	0.484E-03	2580.24869	907.96503	0.0
	P Q	11	4 s	11	Eo	15	s 3-1	nu4	c1672.29462	0.0	0.319E-03	2914.40214	1242.10653	0.0
*	S R	4	2 s	5	Eo	3	a 4-1	nu4	1672.45710	-18.6	0.673E-02	1856.28804	183.82908	1.0
*	S R	5	3 a	6	A2o	1	s 5-1	nu4	1672.55608	5.1	0.145E-01	1937.78219	265.22662	1.0
	P Q	11	3 s	11	A2e	10	s 2-1	nu4	1672.75068	-41.1	0.333E-03	2939.69214	1266.93735	1.0
	P Q	10	3 a	10	A2o	8	a 2-1	nu4	1672.84150	0.6	0.741E-03	2725.39127	1052.54983	1.0
	P Q	10	2 a	10	Ee	17	a 1-1	nu4	1673.09997	55.2	0.248E-03	2743.45226	1070.35781	1.0
*	O Q	6	3 a	6	A2o	5	s 1 1	nu4	1673.17175	68.7	0.815E-02	2057.14233	383.97745	1.0
*	U R	5	1 a	6	Eo	4	s 5 1	nu4	c1673.25652	0.0	0.331E-04	1967.88595	294.62999	0.0
	P Q	11	5 s	11	Ee	14	s 4-1	nu4	c1673.26800	0.0	0.535E-03	2883.34833	1210.08099	0.0
*	T R	12	7 s	13	Ee	5	s10 0	2nu2	c1673.28534	0.0	0.131E-04	3032.15793	1358.87122	0.0
*	* Q	10	1 a	10	Eo	19	* * *	**	c1673.29576	0.0	0.361E-04	2754.32701	1081.02772	0.0
*	O Q	5	3 s	5	A2e	5	a 1 1	nu4	1673.62187	76.6	0.777E-02	1938.13083	264.51662	1.0
	P Q	11	6 s	11	A2o	6	s 5-1	nu4	1673.97510	-2.4	0.146E-02	2844.73618	1170.76084	1.0
	Q P	10	8 s	9	Eo	15	a 8 0	2nu2	c1674.44121	0.0	0.433E-03	2527.65289	853.21120	0.0
	P Q	11	7 s	11	Ee	10	s 6-1	nu4	c1674.52555	0.0	0.927E-03	2798.56207	1124.03568	0.0
*	S R	6	4 a	7	Ee	2	s 6-1	nu4	1674.55367	9.2	0.691E-02	2032.83724	358.28449	1.0
*	S R	5	3 s	6	A2e	2	a 5-1	nu4	1674.58813	-17.0	0.149E-01	1939.10645	264.51662	1.0
*	O Q	10	2 a	10	Ee	18	s 0 1	nu4	c1674.63038	0.0	0.218E-03	2744.99624	1070.35781	0.0
	P Q	11	8 s	11	Eo	8	s 7-1	nu4	1674.91960	-15.3	0.112E-02	2744.69261	1069.77148	1.0
	P Q	11	11 s	11	Ee	3	s10-1	nu4	c1675.11623	0.0	0.108E-02	2535.11748	860.00074	0.0
	P Q	11	9 s	11	A2e	3	s 8-1	nu4	c1675.15052	0.0	0.258E-02	2682.96210	1007.80842	0.0
	P Q	11	10 s	11	Eo	4	s 9-1	nu4	1675.21353	-62.0	0.135E-02	2613.17796	937.95823	0.0
	P Q	11	11 a	11	Eo	3	a10-1	nu4	1675.56150	-17.2	0.601E-03	2536.56179	860.99857	1.0
*	Q Q	13	1 a	13	Eo	24	s 1-1	nu4	c1675.82507	0.0	0.101E-04	3456.18589	1780.39613	0.0
	P Q	11	10 a	11	Ee	4	a 9-1	nu4	c1676.18140	0.0	0.712E-03	2614.96760	938.78822	0.0
	Q R	3	3 a	4	A2o	1	s 3 0	2nu2	1676.20154	-26.3	0.248E+00	1762.86198	86.65781	1.0
*	S R	7	5 a	8	Eo	3	s 7-1	nu4	1676.42000	7.2	0.579E-02	2140.12629	463.70701	1.0
	R R	2	2 s	3	Eo	3	s 3 1	nu4	1676.50378	-6.6	0.746E+00	1721.30042	44.79598	1.0
*	S R	6	4 s	7	Eo	3	a 6-1	nu4	1676.59480	-18.4	0.706E-02	2034.18082	357.58418	1.0
*	O Q	9	2 s	9	Eo	17	a 0 1	nu4	1676.64680	-73.8	0.559E-03	2550.80447	874.15029	1.0
	P Q	11	9 a	11	A2o	4	a 8-1	nu4	1676.72360	12.6	0.127E-02	2685.23360	1008.51126	1.0
*	U R	5	1 s	6	Ee	4	a 5 1	nu4	c1677.13350	0.0	0.125E-03	1971.10083	293.96826	0.0
	P Q	11	8 a	11	Ee	9	a 7-1	nu4	c1677.22696	0.0	0.500E-03	2747.60228	1070.37730	0.0
	R R	2	2 a	3	Ee	3	a 3 1	nu4	1677.26953	7.8	0.675E+00	1722.85603	45.58728	1.0
	Q P	10	9 s	9	A2e	5	a 9 0	2nu2	c1677.37264	0.0	0.599E-03	2468.05429	790.68053	0.0
*	N Q	9	4 s	9	Eo	13	s 1 0	2nu2	1677.50428	-8.3	0.258E-03	2508.44530	830.94019	1.0
*	* Q	15	3 a	15	A2o	13	* * *	**	n1677.54866	0.0	0.168E-04	3988.63294	2311.08428	0.0
	P Q	11	7 a	11	Eo	9	a 6-1	nu4	1677.69800	-39.4	0.360E-03	2802.26909	1124.56715	1.0
*	T R	8	3 s	9	A2e	2	s 6 0	2nu2	c1677.74137	0.0	0.114E-04	2357.03012	679.28786	0.0
*	U R	9	4 a	10	Ee	6	s 8 1	nu4	c1677.97745	0.0	0.253E-04	2509.43447	831.45801	0.0
	P Q	12	4 s	12	Eo	18	s 3-1	nu4	1678.03200	-23.5	0.349E-04	3153.86733	1475.83298	1.0
*	S R	8	6 a	9	A2e	1	s 8-1	nu4	1678.15319	5.5	0.870E-02	2259.62339	581.47075	1.0
	P Q	11	6 a	11	A2e	6	a 5-1	nu4	1678.23310	-22.2	0.462E-03	2849.47064	1171.23532	1.0
*	T R	11	6 s	12	A2o	3	s 9 0	2nu2	c1678.39607	0.0	0.559E-04	2849.15114	1170.76084	0.0
*	S R	7	5 s	8	Ee	3	a 7-1	nu4	1678.47632	-12.5	0.589E-02	2141.49061	463.01304	1.0
*	O Q	4	4 a	4	Ee	6	s 2 1	nu4	1678.75880	-29.5	0.189E-02	1818.92497	140.16322	1.0
	P Q	11	5 a	11	Eo	14	a 4-1	nu4	c1678.77801	0.0	0.123E-03	2889.29120	1210.51206	0.0
	P Q	11	4 a	11	Ee	16	a 3-1	nu4	c1678.89456	0.0	0.155E-04	2921.41309	1242.50505	0.0
	P Q	12	2 s	12	Eo	22	s 1-1	nu4	c1678.93528	0.0	0.293E-04	3196.85891	1517.94098	0.0
	Q R	3	2 a	4	Ee	3	s 2 0	2nu2	1678.96509	-32.3	0.130E+00	1784.15206	105.18374	1.0
	P Q	12	5 s	12	Ee	16	s 4-1	nu4	c1679.03167	0.0	0.982E-04	3123.13837	1444.10524	0.0
	P Q	12	12 s	12	A2o	1	s11-1	nu4	c1679.03487	0.0	0.821E-03	2691.04234	1012.00638	0.0
	P Q	12	11 s	12	Ee	5	s10-1	nu4	c1679.45739	0.0	0.484E-03	2776.89694	1097.43706	0.0
	P Q	12	12 a	12	A2e	2	a11-1	nu4	1679.46760	3.3	0.394E-03	2692.52187	1013.05460	1.0
	P Q	12	6 s	12	A2o	7	s 5-1	nu4	c1679.47814	0.0	0.307E-03	3084.63133	1405.15377	0.0
	P Q	12	10 s	12	Eo	6	s 9-1	nu4	c1679.73861	0.0	0.439E-03	2854.34795	1174.60806	0.0
	P Q	12	7 s	12	Ee	12	s 6-1	nu4	1679.74890	10.4	0.214E-03	3038.61908	1358.87122	0.0
*	U R	4	0 a	5	A2e	2	s 4 1	nu4	1679.74890	30.6	0.998E-04	1879.03974	199.29390	0.0
*	S R	9	7 a	10	Eo	2	s 9-1	nu4	1679.75040	-1.2	0.297E-02	2391.29848	711.54796	1.0
	P Q	12	9 s	12	A2e	4	s 8-1	nu4	1679.87770	-15.1	0.724E-03	2923.64635	1243.76714	1.0
	P Q	12	8 s	12	Eo	10	s 7-1	nu4	1679.87776	-32.4	0.284E-03	2985.00837	1305.12737	0.0
*	O Q	5	4 a	5	Ee	7	s 2 1	nu4	1680.07810	-29.3	0.345E-02	1919.48926	239.40823	1.0
*	* Q	12	1 s	12	Ee	22	* * *	**	n1680.17055	0.0	0.390E-04	3208.60392	1528.43337	0.0
*	S R	8	6 s	9	A2o	2	a 8-1	nu4	1680.23022	-10.0	0.883E-02	2261.01085	580.77963	1.0
	P Q	12	11 a	12	Eo	5	a10-1	nu4	c1680.42697	0.0	0.217E-03	2778.71929	1098.29418	0.0
*	N Q	5	5 s	5	Ee	4	s 2 0	2nu2	c1680.67991	0.0	0.134E-03	1885.95123	205.26910	0.0
	Q R	3	1 a	4	Eo	3	s 1 0	2nu2	1680.70276	-30.1	0.121E+00	1796.98404	116.27827	1.0
	P Q	12	3 s	12	A2e	11	s 2-1	nu4	1680.87909	16.3	0.261E-03	3181.28151	1500.40405	1.0
*	* Q	11	2 a	11	Ee	19	* * *	**	n1680.98108	0.0	0.120E-03	2965.94632	1284.96524	0.0
*	O Q	4	4 s	4	Eo	5	a 2 1	nu4	1681.11630	-11.4	0.168E-02	1820.47545	139.35801	1.0
*	S R	10	8 a	11	Ee	3	s10-1	nu4	1681.21070	-0.2	0.185E-02	2535.11748	853.90676	1.0
	P Q	11	3 a	11	A2o	10	a 2-1	nu4	1681.33461	160.1	0.250E-03	2948.60757	1267.28897	1.0
	P Q	12	10 a	12	Ee	6	a 9-1	nu4	1681.33461	23.7	0.180E-03	2856.65384	1175.32160	1.0
*	O Q	6	4 a	6	Ee	9	s 2 1	nu4	1681.38810	-37.4	0.382E-02	2039.67633	358.28449	1.0
*	* Q	11	4 a	11	Ee	17	* * *	**	n1681.40614	0.0	0.160E-04	2923.91119	1242.50505	0.0
*	* Q	11	2 a	11	Ee	20	* * *	**	n1681.82025	0.0	0.275E-04	2966.78549	1284.96524	0.0
*	S R	9	7 s	10	Ee	3	a 9-1	nu4	1681.85630	2.5	0.301E-02	2392.71235	710.85630	1.0
	R R	2	1 s	3	Ee	4	s 2 1	nu4	1682.19165	-14.1	0.351E+00	1738.13178	55.93872	1.0
	P Q	12	9 a	12	A2o	5	a 8-1	nu4	1682.22914	83.6	0.259E-03	2926.59256	1244.37178	0.0
*	T R	7	2 s	8	Eo	5	s 5 0	2nu2	c1682.23262	0.0	0.205E-04	2222.07896	539.84490	0.0
*	O Q	5	4 s	5	Eo	7	a 2 1	nu4	1682.32890	-28.0	0.297E-02	1920.98430	238.65260	1.0
*	S R	11	9 a	12	A2o	1	s11-1	nu4	1682.53010	-9.8	0.213E-02	2691.04234	1008.51126	1.0
*	O Q	7	4 a	7	Ee	10	s 2 1	nu4	1682.69330	-27.2	0.326E-02	2179.37216	496.67614	1.0
	P Q	13	13 s	13	Ee	2	s12-1	nu4	1682.88704	31.3	0.143E-03	2859.03109	1176.14718	0.0
	R R	2	1 a	3	Eo	4	a 2 1	nu4	1682.92102	-5.3	0.281E+00	1739.63076	56.70921	1.0
*	T R	10	5 s	11	Ee	6	s 8 0	2nu2	c1683.09387	0.0	0.544E-04	2677.86748	994.77313	0.0
	P Q	12	8 a	12	Ee	11	a 7-1	nu4	c1683.13030	0.0	0.841E-04	2988.77752	1305.64882	0.0
	P Q	13	13 a	13	Eo	3	a12-1	nu4	c1683.29807	0.0	0.561E-04	2860.55147	1177.25316	0.0
*	N Q	10	4 s	10	Eo	15	s 1 0	2nu2	c1683.31309	0.0	0.288E-03	2710.39934	1027.07848	0.0
*	S R	10	8 s	11	Eo	3	a10-1	nu4	1683.35000	-5.9	0.188E-02	2536.56179	853.21120	1.0
*	O Q	8	3 a	8	A2o	7	s 1 1	nu4	1683.38960	13.0	0.395E-02	2363.22501	679.83671	1.0
*	O Q	6	4 s	6	Eo	9	a 2 1	nu4	1683.47390	-12.5	0.326E-02	2041.05933	357.58418	1.0
	P Q	13	12 s	13	A2o	2	s11-1	nu4	1683.59987	-19.4	0.318E-03	2952.67265	1269.07084	1.0
*	N Q	6	5 s	6	Ee	6	s 2 0	2nu2	c1683.68735	0.0	0.315E-03	2008.05676	324.36891	0.0
*	S R	12	10 a	13	Ee	2	s12-1	nu4	1683.70930	-1.9	0.568E-03	2859.03109	1175.32160	1.0
*	O Q	8	4 a	8	Ee	12	s 2 1	nu4	1684.02140	-9.7	0.231E-02	2338.47264	654.45027	1.0
*	U R	8	3 a	9	A2o	3	s 7 1	nu4	c1684.07412	0.0	0.776E-04	2363.90992	679.83671	0.0
	P Q	12	7 a	12	Eo	12	a 6-1	nu4	c1684.13453	0.0	0.468E-04	3043.45519	1359.32885	0.0
	P Q	13	11 s	13	Ee	6	s10-1	nu4	c1684.19745	0.0	0.135E-03	3037.76527	1353.56634	0.0
*	* Q	10	2 s	10	Eo	19	* * *	**	1684.37810	-26.1	0.259E-03	2754.32701	1069.94630	1.0
	P Q	13	12 a	13	A2e	3	a11-1	nu4	c1684.57421	0.0	0.113E-03	2954.53333	1269.95997	0.0
*	O Q	7	3 s	7	A2e	7	a 1 1	nu4	1684.59710	20.9	0.543E-02	2206.21694	521.62193	0.0
*	Q R	2	1 a	3	Eo	5	s 1-1	nu4	1684.59740	-36.2	0.345E-02	1741.31023	56.70921	0.0
*	O Q	7	4 s	7	Eo	11	a 2 1	nu4	1684.59776	2.4	0.275E-02	2180.63260	496.03508	0.0
	P Q	13	10 s	13	Eo	8	s 9-1	nu4	1684.68717	76.9	0.105E-03	3114.59005	1429.91057	0.0
*	S R	11	9 s	12	A2e	2	a11-1	nu4	1684.71450	10.5	0.216E-02	2692.52187	1007.80842	1.0
*	S R	13	11 a	14	Eo	3	s13-1	nu4	n1684.74379	0.0	0.281E-03	3039.03789	1354.29410	0.0
*	* Q	12	4 a	12	Ee	18	* * *	**	n1684.80683	0.0	0.258E-04	3160.98317	1476.17634	0.0
*	* Q	13	3 s	13	A2e	11	* * *	**	n1684.86547	0.0	0.293E-04	3437.29847	1752.43300	0.0
	P Q	12	6 a	12	A2e	7	a 5-1	nu4	c1685.04178	0.0	0.467E-04	3090.60455	1405.56243	0.0
	P Q	13	9 s	13	A2e	5	s 8-1	nu4	c1685.04749	0.0	0.154E-03	3183.38879	1498.34248	0.0
	P Q	13	5 s	13	Ee	18	s 4-1	nu4	c1685.15438	0.0	0.112E-04	3381.80862	1696.64181	0.0
	P Q	13	8 s	13	Eo	11	s 7-1	nu4	c1685.30142	0.0	0.548E-04	3244.36788	1559.06789	0.0
*	O Q	9	4 a	9	Ee	14	s 2 1	nu4	1685.42030	35.5	0.141E-02	2516.87476	831.45801	1.0
	P Q	13	6 s	13	A2o	8	s 5-1	nu4	c1685.42738	0.0	0.464E-04	3343.50878	1658.07925	0.0
	P Q	13	7 s	13	Ee	14	s 6-1	nu4	c1685.43579	0.0	0.372E-04	3297.69910	1612.26340	0.0
*	S R	14	12 a	15	A2e	1	s14-1	nu4	1685.62836	-34.3	0.258E-03	3231.01311	1545.38132	1.0
*	O Q	8	4 s	8	Eo	12	a 2 1	nu4	1685.76593	51.2	0.193E-02	2339.63141	653.87060	0.0
*	N Q	5	4 s	5	Eo	8	s 1-1	nu4	c1685.77149	0.0	0.212E-04	1924.42507	238.65260	0.0
	P Q	13	11 a	13	Eo	7	a10-1	nu4	c1685.81895	0.0	0.418E-04	3040.11154	1354.29410	0.0
*	S R	12	10 s	13	Eo	3	a12-1	nu4	1685.94460	11.9	0.574E-03	2860.55147	1174.60806	1.0
*	T R	6	1 s	7	Ee	4	s 4 0	2nu2	c1685.96426	0.0	0.465E-04	2098.59022	412.62430	0.0
*	S R	3	1 a	4	Eo	4	s 3 1	nu4	c1686.17579	0.0	0.322E-04	1802.45470	116.27827	0.0
	P Q	14	14 s	14	Eo	3	s13-1	nu4	n1686.66736	0.0	0.459E-04	3039.03789	1352.37053	0.0
*	Q R	2	1 s	3	Ee	5	a 1-1	nu4	1686.86430	7.0	0.285E-02	1742.80232	55.93872	1.0
*	O Q	10	4 a	10	Ee	16	s 2 1	nu4	1686.97270	64.6	0.751E-03	2714.50173	1027.53549	1.0
*	S R	13	11 s	14	Ee	3	a13-1	nu4	c1687.03768	0.0	0.284E-03	3040.60565	1353.56634	0.0
	P Q	14	14 a	14	Ee	3	a13-1	nu4	c1687.06156	0.0	0.133E-04	3040.60565	1353.54246	0.0
*	* Q	9	4 s	9	Eo	14	* * *	**	1687.06190	53.1	0.112E-02	2517.99678	830.94019	1.0
	P Q	13	10 a	13	Ee	8	a 9-1	nu4	1687.06192	-5.5	0.265E-04	3117.57938	1430.51691	0.0
*	N Q	7	5 s	7	Ee	7	s 2 0	2nu2	1687.36793	27.3	0.433E-03	2150.37824	463.01304	1.0
*	T R	9	4 s	10	Eo	5	s 7 0	2nu2	c1687.52880	0.0	0.956E-04	2518.47013	830.94019	0.0
	P Q	14	13 s	14	Ee	4	s12-1	nu4	c1687.65340	0.0	0.475E-04	3140.46198	1452.80963	0.0
*	O Q	11	4 s	11	Eo	17	a 2 1	nu4	1687.96950	3.9	0.338E-03	2930.07564	1242.10653	1.0
*	S R	14	12 s	15	A2o	2	a14-1	nu4	1688.00168	15.4	0.260E-03	3232.63583	1544.63569	1.0
	P Q	13	9 a	13	A2o	6	a 8-1	nu4	c1688.34477	0.0	0.289E-04	3187.20076	1498.85659	0.0
*	* Q	13	4 a	13	Ee	20	* * *	**	n1688.38305	0.0	0.355E-04	3416.73063	1728.34758	0.0
*	* Q	12	2 a	12	Ee	21	* * *	**	n1688.50743	0.0	0.479E-04	3206.75769	1518.25026	0.0
	P Q	14	12 s	14	A2o	3	s11-1	nu4	c1688.54148	0.0	0.752E-04	3233.17343	1544.63569	0.0
	P Q	14	13 a	14	Eo	4	a12-1	nu4	c1688.62921	0.0	0.117E-04	3142.36832	1453.73603	0.0
*	M Q	10	4 s	10	Eo	16	a 0 1	nu4	1688.78000	8.2	0.474E-03	2715.85766	1027.07848	0.0
*	S R	3	1 s	4	Eo	5	a 3 1	nu4	c1688.82325	0.0	0.398E-04	1804.35963	115.53661	0.0
*	N Q	6	4 s	6	Eo	10	s 1-1	nu4	c1688.86808	0.0	0.238E-04	2046.45343	357.58418	0.0
*	T R	5	0 s	6	A2o	2	s 3 0	2nu2	c1688.88263	0.0	0.267E-03	1986.52632	297.64176	0.0
*	* Q	11	4 a	11	Ee	18	* * *	**	n1688.92589	0.0	0.339E-03	2931.43094	1242.50505	0.0
	P Q	12	12 a	12	A2o	10	a 2-1	nu4	n1689.02821	0.0	0.117E-04	3189.79343	1500.76522	0.0
	P Q	14	11 s	14	Ee	8	s10-1	nu4	n1689.32910	0.0	0.269E-04	3317.48556	1628.15646	0.0
*	* Q	13	1 s	13	Ee	25	* * *	**	n1689.51500	0.0	0.124E-04	3469.65459	1780.13959	0.0
*	S R	3	0 s	4	A2o	3	a 2-1	nu4	1689.84448	6.9	0.138E-01	1809.08163	119.23784	1.0
	Q P	9	0 s	8	A2o	9	a 0 0	2nu2	1689.89470	5.9	0.165E-02	2578.39483	888.50072	1.0
	Q P	9	1 s	8	Ee	17	a 1 0	2nu2	1689.97500	8.4	0.826E-03	2574.88974	884.91558	1.0
*	M Q	4	4 a	4	Ee	8	s 0 1	nu4	c1690.01363	0.0	0.931E-04	1830.17422	140.16322	0.0
	P Q	14	10 a	14	Eo	10	a 9-1	nu4	c1690.03649	0.0	0.182E-04	3393.66757	1703.63799	0.0
*	U R	7	2 a	8	Ee	6	s 6 1	nu4	c1690.10920	0.0	0.529E-04	2230.52999	540.42168	0.0
	P Q	14	12 a	14	A2e	4	a11-1	nu4	c1690.18536	0.0	0.144E-04	3235.56890	1545.38132	0.0
	Q P	9	2 s	8	Eo	17	a 2 0	2nu2	1690.22540	23.2	0.834E-03	2564.37337	874.15029	1.0
*	S R	4	1 a	5	Eo	4	s 3-1	nu4	1690.35050	-1.1	0.553E-02	1885.96189	195.61128	1.0
	P Q	15	15 a	15	A2e	1	a14-1	nu4	c1690.39104	0.0	0.268E-04	3231.01311	1540.62014	0.0
*	O Q	12	4 s	12	Eo	20	a 2 1	nu4	n1690.54084	0.0	0.160E-03	3166.37382	1475.83298	0.0
	P Q	14	9 a	14	A2e	6	a 8-1	nu4	c1690.64219	0.0	0.236E-04	3461.94911	1771.31036	0.0
*	O Q	14	4 s	14	Ee	22	s 2 1	nu4	c1690.65682	0.0	0.160E-04	3689.45806	1998.80673	0.0
	Q P	9	3 s	8	A2e	8	a 3 0	2nu2	1690.66450	1.3	0.169E-02	2546.84319	856.17882	1.0
	R R	2	0 a	3	A2e	3	a 1 1	nu4	1691.03821	66.2	0.711E+00	1751.44460	60.41301	1.0
*	R R	4	1 s	5	Ee	4	s 2 0	2nu2	c1691.04270	0.0	0.533E-04	1885.95123	194.90631	0.0
	Q P	9	4 s	8	Eo	16	a 4 0	2nu2	1691.35230	-7.0	0.850E-03	2522.29319	830.94019	1.0
*	U R	12	6 a	13	Ee	4	s10 1	nu4	c1691.44905	0.0	0.110E-04	3097.01158	1405.56243	0.0
*	N Q	6	4 a	6	Ee	10	a 1-1	nu4	c1691.58493	0.0	0.106E-04	2049.86683	358.28449	0.0
	P Q	15	14 s	15	Eo	5	s13-1	nu4	c1691.62199	0.0	0.128E-04	3340.21786	1648.59985	0.0
*	N Q	8	5 s	8	Ee	9	s 2 0	2nu2	c1691.70555	0.0	0.462E-03	2312.76829	621.06555	0.0
	R R	3	1 s	4	A2e	1	a 1 1	nu4	1691.73718	-3.4	0.172E+01	1777.59911	85.86159	1.0
*	U R	8	3 s	9	A2e	3	a 7 1	nu4	c1691.83783	0.0	0.297E-03	2371.12655	679.28786	0.0
*	* Q	12	4 a	12	Ee	20	* * *	**	n1692.27328	0.0	0.995E-04	3168.44962	1476.17634	0.0
	Q P	9	5 s	8	Ee	16	a 5 0	2nu2	1692.34530	-11.8	0.843E-03	2490.72099	798.37451	1.0
	P R	2	1 s	3	Ee	6	s 0 1	nu4	1692.59705	11.0	0.163E+00	1748.53467	55.93872	1.0
*	N Q	11	4 s	11	Eo	19	s 1 0	2nu2	c1692.61782	0.0	0.355E-04	2934.69514	1242.10653	0.0
*	N Q	7	4 s	7	Eo	12	s 1-1	nu4	c1692.66321	0.0	0.195E-04	2188.69945	496.03508	0.0
*	S R	4	1 s	5	Eo	5	a 3-1	nu4	1692.66740	-3.8	0.573E-02	1887.57409	194.90631	1.0
*	* Q	11	2 s	11	Eo	21	* * *	**	n1692.68593	0.0	0.108E-03	2977.29226	1284.60633	0.0
	R R	3	3 a	4	A2o	2	a 4 1	nu4	1692.80103	16.8	0.151E+01	1779.45716	86.65781	1.0
*	M Q	5	4 a	5	Ee	9	s 0 1	nu4	c1692.87867	0.0	0.330E-03	1932.28288	239.40823	0.0
*	S R	5	2 a	6	Ee	5	s 4-1	nu4	1693.04454	-3.2	0.663E-02	1976.66152	283.61666	1.0
*	M Q	4	4 s	4	Eo	7	a 0 1	nu4	1693.28142	42.5	0.144E-03	1832.63518	139.35801	1.0
*	* Q	13	4 s	13	Eo	22	* * *	**	n1693.40606	0.0	0.543E-04	3421.46135	1728.05529	0.0
	P R	2	1 a	3	Eo	6	a 0 1	nu4	1693.63611	26.6	0.155E+00	1750.34266	56.70921	1.0
	Q P	9	6 s	8	A2o	8	a 6 0	2nu2	c1693.73740	0.0	0.161E-02	2452.12396	758.38526	0.0
	P Q	15	12 s	15	A2o	4	s11-1	nu4	c1693.84592	0.0	0.119E-04	3532.29023	1838.45573	0.0
	Q R	4	4 a	5	Ee	1	s 4 0	2nu2	1694.58008	-36.5	0.157E+00	1834.74695	140.16322	1.0
*	Q R	2	2 s	3	Eo	4	a 2 1	nu4	c1694.83431	0.0	0.263E-04	1739.63076	44.79598	0.0

*	S R	5	2 s	6	Eo	5	a 4-1	nu4	1695.37570	5.9	0.677E-02	1978.31225	282.93714	1.0
*	S R	6	3 a	7	A2o	2	s 5-1	nu4	1695.61267	-10.9	0.130E-01	2079.59121	383.97745	1.0
	Q P	9	7 s	8	Ee	15	a 7 0	2nu2	c1695.64691	0.0	0.704E-03	2406.50448	710.85630	0.0
*	O Q	10	3 a	10	A2o	9	s 1 1	nu4	1695.66770	-4.0	0.109E-02	2748.21793	1052.54983	1.0
*	U R	6	1 a	7	Eo	6	s 5 1	nu4	c1696.08945	0.0	0.625E-04	2109.32675	413.23778	0.0
*	O Q	13	2 a	13	Ee	24	s 0 1	nu4	n1696.14758	0.0	0.156E-04	3466.16057	1770.01299	0.0
*	U R	7	2 s	8	Eo	6	a 6 1	nu4	c1696.19277	0.0	0.198E-03	2236.03878	539.84490	0.0
*	M Q	6	4 a	6	Ee	11	s 0 1	nu4	c1696.49595	0.0	0.568E-03	2054.77613	358.28449	0.0
	P R	2	2 s	3	Eo	5	s 1-1	nu4	1696.51310	-11.5	0.476E-01	1741.31023	44.79598	1.0
*	N Q	9	5 s	9	Ee	11	s 2 0	2nu2	1696.59607	-28.4	0.438E-03	2494.97342	798.37451	1.0
*	M Q	5	4 s	5	Eo	9	a 0 1	nu4	1696.97010	59.9	0.452E-03	1935.61671	238.65260	1.0
*	U R	11	5 a	12	Eo	7	s 9 1	nu4	c1697.05092	0.0	0.114E-04	2907.56331	1210.51206	0.0
*	N Q	8	4 s	8	Eo	13	s 1-1	nu4	c1697.15207	0.0	0.134E-04	2351.02478	653.87060	0.0
	P R	2	2 a	3	Ee	5	a 1-1	nu4	1697.21497	-0.7	0.444E-01	1742.80232	45.58728	1.0
*	O Q	5	2 a	5	Eo	6	s 3 1	nu4	1697.45120	-11.0	0.171E-02	1903.53973	206.08743	1.0
	P Q	14	4 s	14	Eo	24	s 3-1	nu4	n1697.90684	0.0	0.117E-04	3696.46774	1998.56090	0.0
*	S R	6	3 s	7	A2e	3	a 5-1	nu4	1697.95581	11.7	0.132E-01	2081.27306	383.31842	1.0
	R R	3	2 s	4	Eo	4	s 3 1	nu4	1698.03210	-5.3	0.479E+00	1802.45470	104.42207	1.0
*	S R	7	4 a	8	Ee	4	s 6-1	nu4	1698.05480	-15.7	0.547E-02	2194.73251	496.67614	1.0
*	O Q	9	3 a	9	A2e	9	a 1 1	nu4	1698.15830	-91.3	0.193E-02	2554.34625	856.17882	1.0
	Q P	9	8 s	8	Eo	14	a 8 0	2nu2	1698.22510	-8.7	0.474E-03	2353.87229	655.64632	1.0
	Q R	4	3 a	5	A2o	2	s 3 0	2nu2	1698.44385	-38.0	0.288E+00	1864.53554	166.08789	1.0
*	* Q	13	4 a	13	Ee	22	* * *	**	n1698.59759	0.0	0.115E-04	3426.94517	1728.34758	0.0
	R R	3	2 a	4	Ee	5	a 3 1	nu4	1699.17615	0.0	0.385E+00	1804.35963	105.18374	1.0
*	O Q	6	5 a	6	Eo	8	s 3 1	nu4	1699.22840	-23.7	0.285E-02	2024.35796	325.12719	0.0
*	M Q	7	5 a	7	Eo	9	s 1 0	2nu2	c1699.68480	0.0	0.779E-04	2163.38989	463.70701	0.0
*	S R	8	5 a	9	Eo	5	s 7-1	nu4	1700.36750	-22.6	0.409E-02	2322.06269	621.69293	1.0
*	S R	7	4 s	8	Eo	4	a 6-1	nu4	1700.40720	8.3	0.553E-02	2196.44145	496.03508	1.0
*	O Q	5	5 a	5	Ee	6	a 3 1	nu4	c1700.43461	0.0	0.152E-02	1905.70489	205.26910	0.0
*	U R	6	1 s	7	Ee	5	a 5 1	nu4	c1700.77123	0.0	0.219E-03	2113.39577	412.62430	0.0
*	M Q	7	4 a	7	Eo	12	s 0 1	nu4	c1700.82468	0.0	0.639E-03	2197.49789	496.67614	0.0
*	O Q	7	5 a	7	Eo	10	s 3 1	nu4	1701.03290	-6.1	0.281E-02	2164.74052	463.70701	1.0
	Q R	4	2 a	5	Ee	4	s 2 0	2nu2	1701.13551	-27.0	0.119E+00	1885.95123	184.55302	1.0
*	* Q	12	2 s	12	Eo	23	* * *	**	n1701.52219	0.0	0.405E-04	3219.46317	1517.94098	0.0
*	M Q	6	4 s	6	Eo	11	a 0 1	nu4	1701.55720	40.2	0.693E-03	2059.13736	357.58418	1.0
*	N Q	10	5 s	10	Ee	11	s 2 0	2nu2	1701.68494	-48.5	0.400E-03	2696.46292	994.77313	1.0
*	O Q	6	5 s	6	Ee	8	a 3 1	nu4	1702.29940	-17.6	0.243E-02	2026.67007	324.36891	1.0
*	S R	9	6 a	10	A2e	2	s 8-1	nu4	1702.55080	-17.2	0.552E-02	2461.55485	759.00233	1.0
*	U R	10	4 a	11	Ee	7	s 8 1	nu4	c1702.59174	0.0	0.218E-04	2730.12612	1027.53549	0.0
*	O Q	8	5 a	8	Eo	10	s 3 1	nu4	1702.63420	-35.2	0.211E-02	2324.33065	621.69293	1.0
*	S R	8	5 s	9	Eo	5	a 7-1	nu4	1702.73350	17.5	0.412E-02	2323.79730	621.06555	1.0
*	O R	2	2 a	3	Ee	6	s 0 1	nu4	1702.94870	13.1	0.606E-03	1748.53467	45.58728	1.0
*	N Q	6	6 a	6	A2o	2	s 3 0	2nu2	1702.94910	-28.7	0.377E-03	1986.52632	283.57435	0.0
	Q R	4	4 a	5	Eo	5	s 1 0	2nu2	1703.23401	-17.3	0.102E+00	1898.84702	195.61128	1.0
	R R	3	1 s	4	Ee	6	s 2 1	nu4	1703.38586	-25.0	0.207E+00	1818.92497	115.53661	1.0
	Q R	4	0 a	5	A2e	3	s 0 0	2nu2	1703.85864	-13.7	0.191E+00	1903.15391	199.29390	1.0
*	O Q	7	5 a	7	Ee	9	a 3 1	nu4	1704.08010	-15.1	0.235E-02	2167.09465	463.01304	1.0
	R R	3	1 a	4	Eo	5	a 2 1	nu4	1704.19580	-13.8	0.141E+00	1820.47545	116.27827	1.0
*	O Q	9	5 a	9	Eo	12	s 3 1	nu4	1704.32770	-9.3	0.138E-02	2503.26346	798.93483	1.0
*	M Q	8	5 a	8	Eo	11	s 1 0	2nu2	c1704.33979	0.0	0.110E-03	2326.02586	621.69293	0.0
*	S R	10	7 a	11	Eo	4	s 9-1	nu4	1704.60150	-15.0	0.170E-02	2613.17796	908.57496	1.0
*	S R	9	6 s	10	A2o	3	a 8-1	nu4	1704.93250	19.9	0.555E-02	2463.31577	758.38526	1.0
*	O R	2	2 s	3	Eo	6	a 0 1	nu4	1705.54940	27.2	0.430E-03	1750.34266	44.79598	1.0
*	U R	5	0 s	6	A2o	3	a 4 1	nu4	1705.65240	0.0	0.781E-03	2003.29416	297.64176	1.0
*	M Q	8	4 a	8	Ee	14	s 0 1	nu4	c1705.80075	0.0	0.538E-03	2360.25059	654.45027	0.0
*	O Q	8	5 s	8	Ee	11	a 3 1	nu4	1705.82080	7.1	0.169E-02	2326.88564	621.06555	1.0
*	O Q	10	5 a	10	Ee	14	s 3 1	nu4	1705.95530	19.1	0.750E-03	2701.22095	995.26756	1.0
*	O Q	11	5 a	11	Ee	15	a 3 1	nu4	1705.99980	-8.5	0.308E-03	2916.08164	1210.08099	1.0
*	N Q	7	6 a	7	A2o	3	s 3 0	2nu2	c1706.27210	0.0	0.801E-03	2128.72982	422.45811	0.0
	Q R	3	1 a	4	Eo	6	s 1-1	nu4	1706.41770	-16.2	0.543E-02	1822.69759	116.27827	1.0
*	S R	11	8 a	12	Ee	5	s10-1	nu4	1706.51720	-24.4	0.956E-03	2776.89694	1070.37730	1.0
	R R	4	4 s	5	Eo	2	s 5 1	nu4	1706.81982	-1.9	0.848E+00	1846.17802	139.35801	1.0
*	M Q	7	4 s	7	Eo	13	a 0 1	nu4	c1706.95355	0.0	0.711E-03	2202.98901	496.03508	0.0
*	S R	10	7 s	11	Ee	4	a 9-1	nu4	1707.00490	23.3	0.170E-02	2614.96760	907.96503	1.0
*	T R	12	6 s	13	A2o	4	s 9 0	2nu2	c1707.14285	0.0	0.324E-04	3112.31371	1405.15377	0.0
*	O Q	11	5 a	11	Eo	16	s 3 1	nu4	1707.57520	29.2	0.352E-03	2918.08434	1210.51206	1.0
*	O Q	9	5 s	9	Ee	13	* * *	**	1707.66390	24.3	0.935E-03	2506.03598	798.37451	1.0
*	S R	4	1 a	5	Eo	6	s 3 1	nu4	1707.92855	1.0	0.136E-03	1903.53973	195.61128	1.0
*	U R	9	3 a	10	A2o	5	s 7 1	nu4	c1708.08404	0.0	0.759E-04	2564.74235	856.65843	0.0
*	S R	12	9 a	13	A2o	2	s11-1	nu4	c1708.29852	0.0	0.995E-03	2952.67265	1244.37178	0.0
	R R	4	4 a	5	Ee	2	a 5 1	nu4	1708.30615	24.2	0.704E+00	1848.46695	140.16322	1.0
*	O Q	12	5 s	12	Ee	17	a 3 1	nu4	1708.86720	2.4	0.153E-03	3152.97220	1444.10524	1.0
*	S R	11	8 s	12	Eo	5	a10-1	nu4	1708.94967	18.6	0.960E-03	2778.71929	1069.77148	1.0
*	Q R	3	1 s	4	Ee	7	a 1-1	nu4	1709.08420	20.3	0.476E-02	1824.61878	115.53661	1.0
*	O Q	12	5 a	12	Eo	17	s 3 1	nu4	1709.24302	-75.4	0.139E-03	3153.72715	1444.47659	1.0
*	M Q	9	5 s	9	Eo	13	s 1 0	2nu2	c1709.51113	0.0	0.181E-04	2508.44530	798.93483	0.0
*	O Q	12	3 a	12	A2o	11	s 1 1	nu4	1709.63570	54.4	0.191E-03	3210.39548	1500.76522	1.0
*	S R	4	0 a	5	A2e	4	s 2-1	nu4	1709.78711	6.4	0.162E-01	1909.08037	199.29390	1.0
*	S R	13	10 a	14	Ee	4	s12-1	nu4	1709.94736	22.9	0.240E-03	3140.46198	1430.51691	1.0
*	T R	7	1 s	8	Ee	6	s 4 0	2nu2	c1709.96201	0.0	0.241E-04	2260.72040	550.75859	0.0
*	* Q	10	5 s	10	Ee	15	* * *	**	c1709.99293	0.0	0.352E-03	2704.76900	994.77313	0.0
*	N Q	8	6 s	8	A2o	4	s 3 0	2nu2	c1710.21076	0.0	0.103E-02	2290.98871	580.77963	0.0
*	S R	12	9 s	13	A2e	3	a11-1	nu4	1710.76670	5.1	0.998E-03	2954.53333	1243.76714	1.0
*	S R	4	1 s	5	Ee	6	a 3 1	nu4	c1710.79740	0.0	0.115E-03	1905.70489	194.90631	0.0
*	* Q	13	2 s	13	Eo	25	* * *	**	n1710.83671	0.0	0.137E-04	3480.58638	1769.74967	0.0
*	T R	11	5 a	12	Ee	8	s 8 0	2nu2	1710.98254	98.2	0.359E-04	2921.05371	1210.08099	1.0
*	O Q	13	5 a	13	Ee	19	a 3 1	nu4	1711.02875	-96.9	0.578E-04	3407.68025	1696.64181	1.0
*	O Q	13	5 s	13	Eo	19	s 3 1	nu4	c1711.13960	0.0	0.504E-04	3408.09388	1696.95789	0.0
*	M Q	9	4 a	9	Ee	16	s 0 1	nu4	1711.35870	-24.6	0.363E-03	2542.81917	831.45801	1.0
*	S R	14	11 a	15	Eo	5	s13-1	nu4	c1711.45451	0.0	0.107E-03	3340.21786	1628.76733	0.0
	Q R	5	5 a	6	Eo	2	s 5 0	2nu2	1712.20116	-53.7	0.190E+00	1918.29396	206.08743	1.0
	R R	3	0 s	4	A2o	4	s 1 1	nu4	1712.20117	68.4	0.681E+00	1831.43217	119.23784	1.0
	Q P	8	1 s	7	Ee	15	a 1 0	2nu2	c1712.21182	0.0	0.139E-02	2420.44892	708.23848	0.0
*	S R	13	10 s	14	Eo	4	a12-1	nu4	1712.45262	-51.3	0.240E-03	3142.36832	1429.91057	1.0
	Q P	8	2 s	7	Eo	15	a 2 0	2nu2	1712.52520	9.3	0.139E-02	2409.91960	697.39533	1.0
*	S R	5	1 a	6	Eo	6	s 3-1	nu4	1713.00390	1.7	0.516E-02	2007.63372	294.62999	1.0
*	M Q	8	4 s	8	Eo	15	a 0 1	nu4	1713.07410	-66.9	0.555E-03	2366.95139	653.87060	1.0
	Q P	8	3 s	7	A2e	8	a 3 0	2nu2	1713.08000	-1.6	0.275E-02	2392.36802	679.28786	1.0
*	O Q	14	5 s	14	Ee	21	a 3 1	nu4	n1713.18136	0.0	0.186E-04	3680.65801	1967.47665	0.0
*	U R	8	2 a	9	Ee	7	s 6 1	nu4	c1713.53264	0.0	0.593E-04	2411.44913	697.91701	0.0
	R R	4	3 s	5	A2e	2	s 4 1	nu4	1713.70874	0.8	0.997E+00	1879.03974	165.33108	1.0
*	* Q	11	5 s	11	Ee	17	* * *	**	n1713.83020	0.0	0.515E-04	2923.91119	1210.08099	0.0
	Q P	8	4 s	7	Eo	14	a 4 0	2nu2	1713.92160	-1.3	0.134E-02	2367.79233	653.87060	1.0
*	S R	14	11 s	15	Eo	4	a13-1	nu4	c1714.01883	0.0	0.108E-03	3342.17911	1628.15646	0.0
*	O Q	11	3 s	11	A2e	11	a 1 1	nu4	1714.03445	74.5	0.407E-03	2980.96435	1266.93735	1.0
*	R R	5	1 s	6	Ee	6	s 2 0	2nu2	c1714.08800	0.0	0.594E-04	2008.05676	293.96826	0.0
*	T R	10	4 s	11	Eo	7	s 7 0	2nu2	1714.40521	32.9	0.720E-04	2741.48040	1027.07848	1.0
*	N Q	9	6 s	9	A2o	5	s 3 0	2nu2	c1714.62487	0.0	0.103E-02	2473.00867	758.38526	0.0

	P R	3	1 s	4	Ee	8	s 0 1	nu4	1714.64038	27.7	0.182E+00	1830.17422	115.53661	1.0
	Q P	8	5 s	7	Ee	14	a 5 0	2nu2	c1715.12313	0.0	0.125E-02	2336.18975	621.06555	0.0
	R R	4	3 a	5	A2o	3	a 4 1	nu4	1715.40479	8.6	0.760E+00	1881.49182	166.08789	1.0
*	S R	5	1 s	6	Ee	7	a 3-1	nu4	1715.75180	17.6	0.530E-02	2009.71830	293.96826	1.0
*	O Q	6	6 a	6	A2e	3	s 4 1	nu4	1715.91460	-8.6	0.270E-02	2000.32559	284.41013	1.0
*	Q R	3	2 s	4	Eo	5	a 2 1	nu4	c1716.05239	0.0	0.789E-04	1820.47545	104.42207	0.0
*	S R	6	2 a	7	Ee	6	s 4-1	nu4	1716.12050	-11.6	0.538E-02	2118.39941	402.27775	1.0
	P R	3	1 a	4	Eo	7	a 0 1	nu4	1716.36206	51.5	0.162E+00	1832.63518	116.27827	1.0
	Q P	8	6 s	7	A2o	7	a 6 0	2nu2	1716.78126	-3.6	0.214E-02	2297.56125	580.77963	1.0
	Q R	5	4 a	6	Ee	3	s 4 0	2nu2	1717.12646	-37.6	0.155E+00	1956.53845	239.40823	1.0
*	M Q	10	4 a	10	Ee	18	s 0 1	nu4	c1717.45270	0.0	0.202E-03	2744.99624	1027.53549	0.0
*	T R	9	3 s	10	A2e	4	s 6 0	2nu2	c1717.64490	0.0	0.259E-03	2573.82086	856.17882	0.0
*	O Q	7	6 a	7	A2e	4	s 4 1	nu4	1718.02170	-10.4	0.410E-02	2141.24555	423.22281	1.0
	P R	3	2 s	4	Eo	6	s 1-1	nu4	1718.27478	-7.4	0.785E-01	1822.69759	104.42207	1.0
*	M Q	5	5 a	5	Eo	8	s 1-1	nu4	c1718.33666	0.0	0.382E-04	1924.42507	206.08743	0.0
*	S R	6	2 s	7	Eo	7	a 4-1	nu4	1718.88950	18.4	0.542E-02	2120.53549	401.64783	1.0
*	U R	7	1 a	8	Eo	7	s 5 1	nu4	c1718.95693	0.0	0.813E-04	2270.27698	551.32034	0.0
	Q P	8	7 s	7	Ee	13	a 7 0	2nu2	1719.02011	16.9	0.703E-03	2251.91245	532.89403	1.0
*	S R	7	3 a	8	A2o	3	s 5-1	nu4	1719.11229	-16.4	0.927E-02	2241.33686	522.22293	1.0
*	O Q	10	6 s	10	A2o	6	a 4 1	nu4	1719.20490	-37.5	0.878E-03	2674.31508	955.10643	1.0
	P R	3	2 a	4	Ee	7	a 1-1	nu4	1719.43713	20.9	0.711E-01	1824.61878	105.18374	1.0
	R R	4	2 s	5	Eo	6	s 3 1	nu4	1719.70959	-10.6	0.271E+00	1903.53973	183.82908	1.0
*	O Q	6	6 s	6	A2o	3	a 4 1	nu4	1719.71740	-24.1	0.228E-02	2003.29416	283.57435	0.0
*	M Q	9	4 s	9	Eo	17	a 0 1	nu4	c1719.85641	0.0	0.353E-03	2550.80447	830.94019	0.0
*	O Q	8	6 a	8	A2e	5	s 4 1	nu4	1720.11620	-17.5	0.377E-02	2301.58870	581.47075	1.0
*	* R	8	2 s	9	Eo	8	* * *	**	c1720.91061	0.0	0.203E-03	2418.30719	697.39533	0.0
	R R	4	2 a	5	Ee	6	a 3 1	nu4	1721.15063	-12.4	0.190E+00	1905.70489	184.55302	1.0
	Q R	5	3 a	6	A2o	2	s 3 0	2nu2	1721.29773	-19.7	0.229E+00	1986.52632	265.22662	1.0
*	M Q	6	5 a	6	Eo	10	s 1-1	nu4	1721.32381	-24.3	0.126E-03	2046.45343	325.12719	1.0
	P R	3	3 s	4	A2e	2	s 2-1	nu4	1721.63477	-1.6	0.495E-01	1807.49652	85.86159	1.0
*	M Q	5	5 s	5	Ee	8	a 1-1	nu4	1721.71368	-3.5	0.620E-04	1926.98313	205.26910	1.0
	R R	5	5 s	6	Ee	2	s 6 1	nu4	1721.74487	-2.5	0.748E+00	1927.01422	205.26910	1.0
*	S R	7	3 s	8	A2e	4	a 5-1	nu4	1721.89392	28.2	0.928E-02	2243.51303	521.62193	1.0
*	S R	8	4 a	9	Ee	6	s 6-1	nu4	1721.97329	-28.4	0.348E-02	2376.42640	654.45027	1.0
*	O Q	9	6 a	9	A2e	6	s 4 1	nu4	1722.14260	12.0	0.264E-02	2481.14373	759.00233	1.0
*	O Q	7	6 s	7	A2o	4	a 4 1	nu4	1722.19140	-12.9	0.323E-02	2144.65080	422.45811	1.0
	P R	3	3 a	4	A2o	3	a 2-1	nu4	1722.42383	0.1	0.452E-01	1809.08163	86.65781	1.0
*	O Q	11	6 s	11	A2o	7	a 4 1	nu4	c1723.35374	0.0	0.603E-03	2894.11270	1170.76084	0.0
*	* Q	11	4 a	11	Ee	19	* * *	**	n1723.44127	0.0	0.364E-04	2965.94632	1242.50505	0.0
	R R	5	5 a	6	Eo	3	a 6 1	nu4	1723.82703	27.0	0.566E+00	1929.91176	206.08743	1.0
*	O Q	10	6 a	10	A2e	7	s 4 1	nu4	1724.08430	-0.1	0.151E-02	2679.73508	955.65077	1.0
*	* Q	11	4 a	11	Ee	20	* * *	**	n1724.28044	0.0	0.625E-04	2966.78549	1242.50505	0.0
*	N Q	7	7 s	7	Ee	4	s 4 0	2nu2	c1724.33956	0.0	0.225E-03	2098.59022	374.24900	0.0
*	U R	6	0 a	7	A2e	4	s 4 1	nu4	c1724.35699	0.0	0.357E-03	2141.24555	416.88774	0.0
*	U R	7	1 s	8	Ee	7	a 5 1	nu4	c1724.43584	0.0	0.267E-03	2275.19451	550.75859	0.0
	Q R	5	2 a	6	Ee	6	s 2 0	2nu2	1724.43994	-1.6	0.864E-01	2008.05676	283.61666	1.0
	R R	4	1 s	5	Ee	7	s 2 1	nu4	1724.57910	-38.5	0.102E+00	1919.48926	194.90631	1.0
*	O Q	8	6 s	8	A2o	5	a 4 1	nu4	1724.66550	1.7	0.268E-02	2305.44496	580.77963	0.0
*	S R	9	5 a	10	Eo	6	s 7-1	nu4	1724.70560	-37.4	0.233E-02	2523.64417	798.93483	1.0
*	S R	8	4 s	9	Eo	6	a 6-1	nu4	1724.76770	22.5	0.347E-02	2378.63605	653.87060	1.0
*	O Q	14	3 a	14	A2o	13	s 1 1	nu4	n1724.93256	0.0	0.225E-04	3747.86474	2022.93218	0.0
*	O R	3	2 a	4	Ee	8	s 0 1	nu4	1724.99190	14.2	0.151E-02	1830.17422	105.18374	0.0
*	M Q	7	5 a	7	Eo	12	s 1-1	nu4	1724.99264	2.0	0.213E-03	2188.69945	463.70701	1.0
	R R	4	1 a	5	Eo	7	a 2 1	nu4	1725.37109	-19.3	0.586E-01	1920.98430	195.61128	1.0
*	M Q	6	5 s	6	Ee	10	a 1-1	nu4	1725.49898	10.6	0.189E-03	2049.86683	324.36891	1.0
*	O Q	11	6 a	11	A2e	8	s 4 1	nu4	1725.92376	61.8	0.738E-03	2897.15290	1171.23532	1.0
	Q R	5	1 a	6	Eo	7	s 1 0	2nu2	1726.38904	16.9	0.706E-01	2021.01734	294.62999	1.0
*	O Q	12	6 s	12	A2o	8	a 4 1	nu4	1726.53390	-3.9	0.307E-03	3131.68806	1405.15377	1.0
*	U R	11	4 a	12	Ee	10	s 8 1	nu4	c1727.05284	0.0	0.147E-04	2969.55808	1242.50505	0.0
*	* Q	9	6 s	9	A2o	6	* * *	**	1727.19460	-10.1	0.157E-02	2485.58087	758.38526	1.0
*	* Q	10	4 s	10	Eo	19	* * *	**	c1727.24500	0.0	0.189E-03	2754.32701	1027.07848	0.0
*	S R	10	6 a	11	A2e	3	s 8-1	nu4	1727.30840	-29.3	0.283E-02	2682.96210	955.65077	1.0
*	S R	9	5 s	10	Ee	7	a 7-1	nu4	1727.51300	29.8	0.232E-02	2525.88453	798.37451	1.0
*	O Q	12	6 a	12	A2e	9	s 4 1	nu4	c1727.71511	0.0	0.313E-03	3133.28406	1405.56243	0.0
*	N Q	8	7 s	8	Ee	6	s 4 0	2nu2	1727.82700	6.3	0.426E-03	2260.72040	532.89403	1.0
*	O R	3	2 s	4	Eo	7	a 0 1	nu4	1728.21840	52.9	0.105E-02	1832.63518	104.42207	1.0
*	Q R	4	1 a	5	Eo	8	s 1-1	nu4	1728.81300	-7.9	0.521E-02	1924.42507	195.61128	1.0
*	O Q	13	6 s	13	A2o	9	a 4 1	nu4	1729.02395	-3.8	0.123E-03	3387.10358	1658.07925	1.0
	Q R	6	6 a	7	A2e	1	s 6 0	2nu2	1729.03162	-29.8	0.420E+00	2013.44473	284.41013	1.0
	R R	5	4 s	6	Eo	4	s 5 1	nu4	1729.23401	6.6	0.446E+00	1967.88595	238.65260	1.0
*	M Q	8	5 a	8	Eo	13	s 1-1	nu4	c1729.32974	0.0	0.238E-03	2351.02478	621.69293	0.0
*	O Q	13	6 a	13	A2e	10	s 4 1	nu4	n1729.44640	0.0	0.116E-03	3387.87345	1658.42705	0.0
*	S R	5	1 a	6	Eo	8	s 3 1	nu4	1729.72754	-4.3	0.428E-03	2024.35796	294.62999	1.0
*	S R	11	7 a	12	Eo	6	s 9-1	nu4	1729.78059	-2.1	0.783E-03	2854.34795	1124.56715	1.0
*	S R	10	6 s	11	A2o	4	a 8-1	nu4	1730.12910	19.3	0.281E-02	2685.23360	955.10643	1.0
*	M Q	7	5 s	7	Ee	11	a 1-1	nu4	c1730.14643	0.0	0.290E-03	2193.15945	463.01304	0.0
*	* Q	10	6 s	10	A2o	7	* * *	**	1730.27490	13.1	0.624E-03	2685.38002	955.10643	1.0
*	* Q	12	4 a	12	Ee	21	* * *	**	n1730.58135	0.0	0.352E-04	3206.75769	1476.17634	0.0
*	O Q	14	6 s	14	A2o	10	a 4 1	nu4	c1731.08092	0.0	0.416E-04	3660.39863	1929.32140	0.0
*	O Q	14	6 a	14	A2e	11	s 4 1	nu4	c1731.32068	0.0	0.377E-04	3660.92263	1929.61381	0.0
	R R	5	4 a	6	Ee	4	a 5 1	nu4	1731.69360	10.0	0.308E+00	1971.10083	239.40823	1.0
*	N Q	9	7 s	9	Ee	8	s 4 0	2nu2	c1731.79580	0.0	0.486E-03	2442.65175	710.85630	0.0
*	O Q	13	3 s	13	A2e	13	a 1 1	nu4	n1731.86443	0.0	0.540E-04	3484.29743	1752.43300	0.0
*	U R	10	3 a	11	A2o	5	s 7 1	nu4	c1731.96381	0.0	0.575E-04	2784.51339	1052.54983	0.0
*	Q R	4	1 s	5	Ee	8	a 1-1	nu4	1732.08060	37.8	0.502E-02	1926.98313	194.90631	1.0
*	S R	12	8 a	13	Ee	6	s10-1	nu4	1732.11470	-17.5	0.399E-03	3037.76527	1305.64882	1.0
*	S R	11	7 s	12	Ee	6	a 9-1	nu4	1732.62070	25.4	0.778E-03	2856.65384	1124.03568	1.0
*	S R	5	1 s	6	Ee	8	a 3 1	nu4	1732.70012	-16.9	0.205E-03	2026.67007	293.96826	1.0
*	O Q	15	6 s	15	A2o	11	a 4 1	nu4	n1733.14479	0.0	0.123E-04	3951.80026	2218.65547	0.0
*	O Q	15	6 a	15	A2e	12	s 4 1	nu4	n1733.22882	0.0	0.106E-04	3952.12730	2218.89848	0.0
*	N Q	11	6 s	11	A2o	8	s 3 0	2nu2	n1734.16684	0.0	0.140E-03	2904.92768	1170.76084	0.0
*	O Q	7	7 a	7	Eo	6	s 5 1	nu4	1734.21658	-34.0	0.966E-03	2109.32675	375.10677	0.0
*	M Q	9	5 a	9	Eo	16	s 1-1	nu4	1734.29900	-64.0	0.198E-03	2533.24023	798.93483	0.0
	Q P	7	0 s	6	A2o	7	a 0 0	2nu2	1734.29910	18.9	0.416E-02	2288.69027	554.39306	1.0
*	S R	13	9 a	14	A2o	3	s11-1	nu4	c1734.32058	0.0	0.376E-03	3233.17343	1498.85659	0.0
	Q P	7	1 s	6	Ee	13	a 1 0	2nu2	1734.41850	-3.2	0.207E-02	2285.17741	550.75859	1.0
	Q P	7	2 s	6	Eo	13	a 2 0	2nu2	1734.79350	0.8	0.203E-02	2274.63832	539.84490	1.0
	Q R	6	5 a	7	Eo	4	s 5 0	2nu2	1734.95532	-31.7	0.154E+00	2060.08568	325.12719	1.0
*	S R	12	8 s	13	Eo	7	a10-1	nu4	1734.98720	30.3	0.397E-03	3040.11154	1305.12737	1.0
*	* Q	11	4 s	11	Eo	21	* * *	**	n1735.18573	0.0	0.875E-04	2977.29226	1242.10653	0.0
	Q P	7	3 s	6	A2e	6	a 3 0	2nu2	1735.45000	1.7	0.391E-02	2257.07176	521.62193	1.0
*	T R	13	6 s	14	A2o	5	s 9 0	2nu2	n1735.51406	0.0	0.132E-04	3393.59331	1658.07925	0.0
*	M Q	8	5 s	8	Ee	13	a 1-1	nu4	c1735.60977	0.0	0.297E-03	2356.67909	621.06555	0.0
	R R	5	3 s	6	A2e	3	s 4 1	nu4	1735.80884	-1.3	0.517E+00	2000.32559	264.51662	1.0
*	S R	5	0 s	6	A2o	4	a 2-1	nu4	1735.89542	36.3	0.133E-01	2033.53355	297.64176	1.0
*	O Q	10	7 s	10	Ee	10	a 5 1	nu4	1735.99240	-9.4	0.421E-03	2643.95837	907.96503	1.0
*	S R	6	1 a	7	Eo	8	s 3-1	nu4	1736.15240	-2.5	0.400E-02	2149.39043	413.23778	1.0
*	S R	14	10 a	15	Ee	6	s12-1	nu4	c1736.38868	0.0	0.820E-04	3440.52761	1704.14728	0.0

	Q P	7	4 s	6	Eo	12	a 4 0	2nu2	1736.44090	-0.1	0.180E-02	2232.47599	496.03508	1.0
	R R	6	6 s	7	A2o	1	s 7 1	nu4	1736.50537	-5.0	0.120E+01	2020.08022	283.57435	1.0
*	T R	7	0 s	8	A2o	4	s 3 0	2nu2	c1736.59733	0.0	0.121E-03	2290.98871	554.39306	0.0
*	O Q	8	7 a	8	Eo	7	s 5 1	nu4	1736.61250	45.0	0.133E-02	2270.27698	533.66898	0.0
*	U R	9	2 a	10	Ee	9	s 6 1	nu4	c1736.87216	0.0	0.510E-04	2611.48776	874.61644	0.0
*	Q R	4	2 s	5	Eo	7	a 2 1	nu4	c1737.15290	0.0	0.316E-04	1920.98430	183.82908	0.0
*	S R	13	9 s	14	A2e	4	a11-1	nu4	1737.22512	-13.0	0.373E-03	3235.56890	1498.34248	1.0
	P R	4	1 s	5	Ee	9	s 0 1	nu4	1737.38074	41.7	0.154E+00	1932.28288	194.90631	1.0
*	R R	6	1 s	7	Ee	7	s 2 0	2nu2	1737.75582	18.8	0.466E-04	2150.37824	412.62430	1.0
*	M Q	13	4 a	13	Ee	24	s 0 1	nu4	n1737.81299	0.0	0.144E-04	3466.16057	1728.34758	0.0
*	N R	4	3 s	5	A2e	3	s 0 0	2nu2	c1737.82208	0.0	0.279E-03	1903.15391	165.33108	0.0
	Q P	7	5 s	6	Ee	12	a 5 0	2nu2	1737.83772	-5.2	0.151E-02	2200.85128	463.01304	1.0
	R R	5	3 a	6	A2o	3	a 4 1	nu4	1738.06714	-4.0	0.333E+00	2003.29416	265.22662	1.0
*	P R	5	2 s	6	Eo	7	s 1 0	2nu2	c1738.08148	0.0	0.127E-04	2021.01734	282.93714	0.0
	R R	4	0 a	5	A2e	5	a 1 1	nu4	1738.84380	68.7	0.326E+00	1938.13083	199.29390	1.0
*	O Q	9	7 a	9	Eo	9	s 5 1	nu4	1738.96070	0.4	0.112E-02	2450.50862	711.54796	1.0
*	O Q	7	7 s	7	Ee	5	a 5 1	nu4	1739.14490	-18.7	0.739E-03	2113.39577	374.24900	0.0
*	T R	12	5 s	13	Ee	10	s 8 0	2nu2	c1739.17296	0.0	0.187E-04	3183.26853	1444.10524	0.0
*	S R	14	10 s	15	Eo	6	a12-1	nu4	c1739.33866	0.0	0.815E-04	3442.98424	1703.63799	0.0
	R R	6	6 a	7	A2e	2	a 7 1	nu4	1739.39307	25.0	0.788E+00	2023.80070	284.41013	1.0
*	S R	6	1 s	7	Ee	8	a 3-1	nu4	1739.50030	11.3	0.406E-02	2152.12347	412.62430	1.0
*	S R	7	2 a	8	Ee	8	s 4-1	nu4	1739.66580	-6.6	0.367E-02	2280.08814	540.42168	1.0
	Q P	7	6 s	6	A2o	6	a 6 0	2nu2	n1739.74237	0.0	0.194E-02	2162.20048	422.45811	0.0
*	M Q	10	5 a	10	Eo	18	s 1-1	nu4	c1739.85078	0.0	0.131E-03	2735.11953	995.26756	0.0
*	N Q	12	6 s	12	A2o	9	s 3 0	2nu2	c1739.99477	0.0	0.142E-04	3145.19056	1405.15377	0.0
	P R	4	1 a	5	Eo	9	a 0 1	nu4	1740.01123	58.0	0.124E+00	1935.61671	195.61128	1.0
*	O Q	11	7 s	11	Ee	12	a 5 1	nu4	1740.01290	14.6	0.287E-03	2864.04712	1124.03568	1.0
	Q R	6	4 a	7	Ee	4	s 4 0	2nu2	1740.30420	-15.3	0.106E+00	2098.59022	358.28449	1.0
	P R	4	2 s	5	Eo	8	s 1-1	nu4	1740.59521	-7.8	0.819E-01	1924.42507	183.82908	1.0
*	O R	3	3 s	4	A2e	3	a 1 1	nu4	1740.75370	-63.1	0.964E-03	1826.62160	85.86159	1.0
*	O Q	10	7 a	10	Eo	11	s 5 1	nu4	1741.22480	11.3	0.711E-03	2649.79863	908.57496	1.0
	R R	5	2 s	6	Eo	8	s 3 1	nu4	1741.41919	-16.3	0.134E+00	2024.35796	282.93714	1.0
*	T R	11	4 s	12	Eo	9	s 7 0	2nu2	c1741.64028	0.0	0.426E-04	2983.73131	1242.10653	0.0
*	U R	8	1 a	9	Eo	9	s 5 1	nu4	1741.76201	-0.1	0.802E-04	2450.50862	708.74660	1.0
*	M Q	9	5 s	9	Ee	15	a 1-1	nu4	1741.81760	-64.0	0.227E-03	2540.19851	798.37451	1.0
*	O Q	8	7 s	8	Ee	7	a 5 1	nu4	1742.29960	-8.8	0.901E-03	2275.19451	532.89403	1.0
	P R	4	2 a	5	Ee	8	a 1-1	nu4	1742.43359	34.8	0.702E-01	1926.98313	184.55302	1.0
*	S R	7	2 s	8	Eo	8	a 4-1	nu4	1743.03270	-13.2	0.363E-02	2282.87892	539.84490	1.0
*	S R	8	3 a	9	A2o	4	s 5-1	nu4	1743.05040	10.9	0.561E-02	2422.88602	679.83671	0.0
	R R	5	2 a	6	Ee	8	a 3 1	nu4	1743.05070	-27.1	0.791E-01	2026.67007	283.61666	1.0
*	O Q	11	7 a	11	Eo	13	s 5 1	nu4	1743.36615	-13.0	0.371E-03	2867.93460	1124.56715	0.0
*	O Q	12	7 s	12	Ee	14	a 5 1	nu4	1743.46686	20.1	0.153E-03	3102.33607	1358.87122	1.0
*	* Q	12	4 s	12	Eo	23	* * *	**	n1743.63019	0.0	0.355E-04	3219.46317	1475.83298	0.0
	P R	4	3 s	5	A2e	4	s 2-1	nu4	1743.74988	5.9	0.770E-01	1909.08037	165.33108	1.0
*	T R	10	3 s	11	A2e	5	s 6 0	2nu2	c1743.77534	0.0	0.175E-03	2795.88014	1052.10640	0.0
	R R	6	5 s	7	Ee	3	s 6 1	nu4	1744.60388	4.2	0.356E+00	2068.97237	324.36891	1.0
	Q R	6	3 a	7	A2o	3	s 3 0	2nu2	1744.75305	6.8	0.146E+00	2128.72982	383.97745	1.0
*	O R	3	3 a	4	A2o	4	s 1 1	nu4	1744.78110	67.4	0.768E-03	1831.43217	86.65781	1.0
*	N Q	8	8 s	8	Eo	5	s 5 0	2nu2	c1744.81343	0.0	0.222E-03	2222.07896	477.26409	0.0
	P R	4	3 a	5	A2o	4	a 2-1	nu4	1744.95105	17.8	0.668E-01	1911.03716	166.08789	1.0
	Q R	7	7 a	8	Eo	1	s 7 0	2nu2	1745.08557	-4.7	0.202E+00	2120.19281	375.10677	1.0
*	O Q	12	7 a	12	Eo	15	s 5 1	nu4	1745.38530	-15.6	0.165E-03	3104.71571	1359.32885	1.0
*	* Q	9	7 s	9	Ee	9	* * *	**	1745.56310	-3.2	0.625E-03	2456.41972	710.85630	1.0
	R R	5	1 s	6	Ee	9	s 2 1	nu4	1745.70410	-39.7	0.437E-01	2039.67633	293.96826	1.0
*	* R	9	2 s	10	Eo	10	* * *	**	c1745.85330	0.0	0.160E-03	2620.00139	874.15029	0.0
*	M Q	11	5 a	11	Eo	20	s 1-1	nu4	c1745.90638	0.0	0.713E-04	2956.41333	1210.51206	0.0
*	O Q	13	7 s	13	Ee	16	a 5 1	nu4	c1746.28043	0.0	0.645E-04	3358.53654	1612.26340	0.0
*	S R	9	4 a	10	Ee	8	s 6-1	nu4	1746.30130	-33.5	0.188E-02	2577.76266	831.45801	1.0
*	M Q	6	6 a	6	A2e	4	s 2-1	nu4	c1746.34867	0.0	0.413E-04	2030.75856	284.41013	0.0
	R R	5	1 a	6	Eo	9	a 2 1	nu4	1746.42900	-13.4	0.209E-01	2041.05933	294.62999	1.0
*	S R	8	3 s	9	A2e	4	a 5-1	nu4	1746.42940	-43.2	0.551E-02	2425.72158	679.28786	0.0
	P R	4	4 s	5	Eo	4	s 3-1	nu4	1746.60376	-1.2	0.129E-01	1885.96189	139.35801	1.0
*	O Q	13	7 a	13	Eo	17	s 5 1	nu4	n1747.29821	0.0	0.639E-04	3359.95098	1612.65277	0.0
	P R	4	4 a	5	Ee	5	a 3-1	nu4	1747.41101	1.4	0.114E-01	1887.57409	140.16322	1.0
*	O R	4	2 a	5	Ee	9	s 0 1	nu4	1747.73420	43.4	0.206E-02	1932.28288	184.55302	1.0
	R R	6	5 a	7	Eo	5	a 6 1	nu4	1748.08679	11.4	0.211E+00	2073.21284	325.12719	1.0
	Q R	6	2 a	7	Ee	7	s 2 0	2nu2	1748.10320	27.1	0.527E-01	2150.37824	402.27775	1.0
*	* R	8	1 s	9	Ee	9	* * *	**	c1748.18219	0.0	0.248E-03	2456.41972	708.23848	0.0
*	N Q	9	8 s	9	Eo	7	s 5 0	2nu2	1748.33450	-7.5	0.366E-03	2403.98157	655.64632	1.0
*	M Q	14	7 s	14	Ee	18	a 5 1	nu4	c1748.60360	0.0	0.229E-04	3632.60272	1883.99402	0.0
*	M Q	10	5 s	10	Ee	17	a 1-1	nu4	c1748.68268	0.0	0.137E-03	2743.45226	994.77313	0.0
*	O Q	14	7 a	14	Eo	19	s 5 1	nu4	n1749.13633	0.0	0.217E-04	3633.45771	1884.32138	0.0
*	* Q	10	7 a	10	Eo	11	* * *	**	1749.16397	-8.0	0.288E-03	2657.12980	907.96503	1.0
*	S R	10	5 a	11	Eo	8	s 7-1	nu4	1749.42270	-23.5	0.113E-02	2744.69261	995.26756	1.0
*	M Q	7	6 a	7	A2e	6	s 2-1	nu4	1749.59314	50.0	0.122E-03	2172.81095	423.22281	1.0
*	S R	9	4 s	10	Ee	7	a 6-1	nu4	1749.70140	64.5	0.184E-02	2580.63514	830.94019	0.0
*	R R	6	2 a	7	Ee	8	a 3-1	nu4	c1749.84726	0.0	0.141E-03	2152.12347	402.27775	0.0
*	M Q	6	6 s	6	A2o	4	a 2-1	nu4	1749.96164	24.4	0.663E-04	2033.53355	283.57435	1.0
	Q R	6	1 a	7	Eo	9	s 1 0	2nu2	1750.15430	21.9	0.399E-01	2163.38989	413.23778	1.0
	Q R	6	0 a	7	A2e	5	s 0 0	2nu2	1750.89661	42.8	0.744E-01	2167.78007	416.88774	1.0
*	U R	7	0 s	8	A2o	5	a 4 1	nu4	1751.04408	-78.2	0.124E-02	2305.44496	554.39306	0.0
	R R	7	7 s	8	Ee	2	s 8 1	nu4	1751.09412	-11.4	0.441E+00	2125.34426	374.24900	1.0
*	S R	6	1 a	7	Eo	10	s 3 1	nu4	1751.50302	2.8	0.220E-02	2164.74052	413.23778	1.0
	R R	6	4 s	7	Eo	6	s 5 1	nu4	1751.74316	5.9	0.210E+00	2109.32675	357.58418	1.0
*	O R	4	2 s	5	Eo	9	a 0 1	nu4	1751.79120	35.7	0.143E-02	1935.61671	183.82908	1.0
*	Q R	5	1 a	6	Eo	10	s 1-1	nu4	1751.82310	-3.4	0.406E-02	2046.45343	294.62999	0.0
	Q R	7	6 a	8	A2e	2	s 6 0	2nu2	1751.93860	-18.9	0.275E+00	2175.16330	423.22281	1.0
*	O Q	10	8 s	10	Eo	9	a 6 1	nu4	1752.19780	-20.9	0.359E-03	2605.41109	853.21120	1.0
*	O Q	8	8 a	8	Ee	5	s 6 1	nu4	1752.38150	1.7	0.633E-03	2230.52999	478.14866	1.0
*	M Q	12	5 a	12	Eo	22	s 1-1	nu4	c1752.39967	0.0	0.331E-04	3196.85891	1444.47659	0.0
*	S R	11	6 a	12	A2e	4	s 8-1	nu4	1752.40880	-22.3	0.123E-02	2923.64635	1171.23532	1.0
*	* Q	13	4 s	13	Eo	25	* * *	**	n1752.53109	0.0	0.127E-04	3480.58638	1728.05529	0.0
*	S R	10	5 s	11	Ee	9	a 7-1	nu4	1752.83080	16.5	0.111E-02	2747.60228	994.77313	1.0
*	M Q	8	6 a	8	A2e	6	s 2-1	nu4	1752.83110	-11.5	0.182E-03	2334.30300	581.47075	1.0
*	S R	11	7 s	11	Ee	13	s 6 0	2nu2	c1753.48090	0.0	0.848E-04	2877.52928	1124.03568	0.0
*	M Q	7	6 s	7	A2o	5	a 2-1	nu4	1753.55244	30.3	0.181E-03	2176.00752	422.45811	1.0
*	S R	6	1 s	7	Ee	9	a 3 1	nu4	1754.46978	-5.7	0.261E-03	2167.09465	412.62430	1.0
	R R	7	7 a	8	Eo	2	a 8 1	nu4	1754.98108	16.3	0.242E+00	2130.08622	375.10677	1.0
*	O Q	9	6 a	9	Ee	7	s 6 1	nu4	1755.01176	-19.2	0.794E-03	2411.44913	656.43545	0.0
	R R	6	4 a	7	Eo	6	a 5 1	nu4	1755.11084	-4.4	0.117E+00	2113.39577	358.28449	1.0
*	S R	12	7 a	13	Eo	8	s 9-1	nu4	1755.25960	-16.0	0.309E-03	3114.59005	1359.32885	1.0
*	U R	11	3 a	12	A2o	6	s 7 1	nu4	1755.68283	-1.1	0.352E-04	3022.97191	1267.28897	1.0
*	S R	11	6 s	12	A2o	5	a 8-1	nu4	1755.83240	6.8	0.121E-02	2926.59256	1170.76084	1.0
*	* Q	11	5 a	11	Ee	19	* * *	**	n1755.86533	0.0	0.445E-04	2965.94632	1210.08099	0.0
*	Q R	5	1 s	6	Ee	10	a 1-1	nu4	1755.90180	32.3	0.385E-02	2049.86683	293.96826	1.0
*	S R	6	0 a	7	A2e	6	s 2-1	nu4	1755.92639	31.8	0.139E-01	2172.81095	416.88774	1.0
*	Q R	5	2 a	6	Ee	9	s 2 1	nu4	c1756.05631	0.0	0.378E-04	2039.67633	283.61666	0.0
*	O Q	11	8 s	11	Eo	11	a 6 1	nu4	c1756.10291	0.0	0.260E-03	2825.87540	1069.77148	0.0
	Q P	6	1 s	5	Ee	11	a 1 0	2nu2	1756.50981	2.1	0.272E-02	2169.13390	412.62430	1.0
*	* Q	11	5 s	11	Ee	20	* * *	**	n1756.70450	0.0	0.266E-04	2966.78549	1210.08099	0.0
	Q P	6	2 s	5	Eo	11	a 2 0	2nu2	1756.93870	-10.2	0.261E-02	2158.58755	401.64783	1.0
*	O Q	10	8 a	10	Ee	9	s 6 1	nu4	1757.58250	15.0	0.606E-03	2611.48776	853.90676	1.0
	Q P	6	3 s	5	A2e	6	a 3 0	2nu2	1757.69090	-1.4	0.476E-02	2141.00946	383.31842	1.0
*	M Q	9	6 a	9	A2e	8	s 2-1	nu4	c1757.73554	0.0	0.190E-03	2516.73023	759.00233	0.0
	R R	6	3 s	7	A2e	4	s 4 1	nu4	1757.92651	-6.2	0.236E+00	2141.24555	383.31842	1.0
*	S R	13	8 a	14	Ee	8	s10-1	nu4	n1757.97411	0.0	0.142E-03	3317.48556	1559.51145	0.0
	Q R	7	5 a	8	Eo	5	s 5 0	2nu2	1758.37081	-11.4	0.902E-01	2222.07896	463.70701	1.0
*	M Q	8	6 s	8	A2o	6	a 2-1	nu4	c1758.56646	0.0	0.265E-03	2339.34844	580.77963	0.0
*	S R	12	7 s	13	Ee	8	a 9-1	nu4	1758.70900	8.4	0.303E-03	3117.57938	1358.87122	1.0
*	O Q	8	8 s	8	Eo	6	a 6 1	nu4	1758.77300	-16.9	0.415E-03	2236.03878	477.26409	1.0
	Q P	6	4 s	5	Eo	10	a 4 0	2nu2	1758.81600	6.7	0.196E-02	2116.39951	357.58418	1.0
*	N Q	12	7 s	12	Ee	15	s 4 0	2nu2	c1758.94639	0.0	0.147E-04	3117.77546	1358.87122	0.0
*	M Q	13	5 a	13	Eo	24	s 1-1	nu4	c1759.26331	0.0	0.134E-04	3456.18589	1696.95789	0.0
*	N R	4	4 s	5	Eo	5	s 1 0	2nu2	c1759.48746	0.0	0.188E-04	1898.84702	139.35801	0.0
*	O R	4	3 a	5	A2o	5	s 1 1	nu4	1759.49180	-75.4	0.287E-02	1925.58723	166.08789	1.0
	R R	5	0 s	6	A2o	5	s 1 1	nu4	1759.50659	60.2	0.270E+00	2057.14233	297.64176	1.0
*	L Q	10	6 a	10	A2e	8	a 1 1	nu4	c1759.65362	0.0	0.913E-04	2715.30247	955.65077	0.0
*	O Q	12	8 s	12	Eo	13	a 6 1	nu4	1759.72540	64.9	0.147E-03	3064.84628	1305.12737	1.0
*	S R	7	1 a	8	Eo	9	s 3-1	nu4	1759.80250	4.9	0.265E-02	2311.12235	551.32034	1.0
	R R	7	6 s	8	A2o	2	s 7 1	nu4	1759.81458	10.7	0.516E+00	2182.27162	422.45811	1.0
*	O Q	11	8 a	11	Ee	11	s 6 1	nu4	1760.03340	28.5	0.352E-03	2830.40785	1070.37730	0.0
*	U R	10	2 a	11	Ee	11	s 6 1	nu4	c1760.05094	0.0	0.352E-04	2830.40785	1070.35781	0.0
	Q P	6	5 s	5	Ee	10	a 5 0	2nu2	c1760.39289	0.0	0.124E-02	2084.75898	324.36891	0.0
	Q R	8	8 a	9	Ee	2	s 8 0	2nu2	1760.45581	33.9	0.166E+00	2238.60108	478.14866	1.0
*	S R	14	9 a	15	A2o	4	s11-1	nu4	c1760.55928	0.0	0.121E-03	3532.29023	1771.74237	0.0
	R R	6	3 a	7	A2o	4	a 4 1	nu4	1760.67204	-13.1	0.124E+00	2144.65080	383.97745	1.0
	P R	5	1 s	6	Ee	11	s 0 1	nu4	1760.81201	41.4	0.104E+00	2054.77613	293.96826	1.0
*	L Q	9	6 s	9	A2o	7	s 1 1	nu4	c1761.06272	0.0	0.106E-03	2519.44370	758.38526	0.0
*	S R	13	8 s	14	Eo	9	a10-1	nu4	1761.46548	50.6	0.140E-03	3320.52831	1559.06789	0.0
*	P R	6	2 s	7	Eo	9	s 1 0	2nu2	c1761.74398	0.0	0.883E-03	2163.38989	401.64783	0.0
*	R R	7	1 s	8	Ee	9	s 2 0	2nu2	c1762.01251	0.0	0.237E-04	2312.76829	550.75859	0.0
*	O Q	12	8 a	12	Ee	13	s 6 1	nu4	1762.33095	-9.6	0.168E-03	3067.98073	1305.64882	1.0
*	* Q	9	8 s	9	Eo	8	* * *	**	1762.66000	-8.7	0.434E-03	2418.30719	655.64632	1.0
*	O Q	13	8 s	13	Eo	15	a 6 1	nu4	n1762.85001	0.0	0.660E-04	3321.91790	1559.06789	0.0
	R R	6	2 s	7	Eo	10	s 3 1	nu4	1763.09265	-0.4	0.571E-01	2164.74052	401.64783	1.0
	P R	5	2 s	6	Eo	10	s 1-1	nu4	1763.51550	-7.9	0.648E-01	2046.45343	282.93714	1.0
*	S R	8	2 a	9	Ee	10	s 4-1	nu4	1763.67540	-11.7	0.216E-02	2461.59358	697.91701	1.0
*	S R	7	1 s	8	Ee	10	a 3-1	nu4	1763.94280	6.3	0.265E-02	2314.70076	550.75859	1.0
	Q R	7	4 a	8	Ee	6	s 4 0	2nu2	1764.04486	6.0	0.593E-01	2260.72040	496.67614	1.0
*	S R	14	9 s	15	A2e	5	a11-1	nu4	c1764.08225	0.0	0.119E-03	3535.40125	1771.31036	0.0
*	U R	9	1 a	10	Eo	11	s 5 1	nu4	c1764.43038	0.0	0.629E-04	2649.79863	885.36964	0.0
*	N Q	9	9 s	9	A2e	2	s 6 0	2nu2	c1764.44273	0.0	0.361E-03	2357.03012	592.58650	0.0
*	O Q	13	8 a	13	Ee	15	s 6 1	nu4	1764.47350	-40.5	0.683E-04	3323.98900	1559.51145	1.0
*	* Q	12	5 s	12	Ee	22	* * *	**	n1764.49868	0.0	0.259E-04	3208.60392	1444.10524	0.0
	P R	5	1 a	6	Eo	11	a 0 1	nu4	1764.51172	43.5	0.747E-01	2059.13736	294.62999	1.0
	R R	7	6 a	8	A2e	3	a 7 1	nu4	1764.56396	-4.5	0.252E+00	2187.78722	423.22281	1.0
	R R	6	2 a	7	Ee	9	a 3 1	nu4	1764.81555	-13.5	0.275E-01	2167.09465	402.27775	1.0
	R R	8	8 s	9	Eo	2	s 9 1	nu4	1765.50439	-18.9	0.300E+00	2242.77037	477.26409	1.0
*	O Q	14	8 s	14	Eo	17	a 6 1	nu4	c1765.52863	0.0	0.247E-04	3596.87180	1831.37216	0.0
*	- Q	11	6 a	11	A2e	9	s 0 0	2nu2	c1765.68239	0.0	0.218E-04	2936.91815	1171.23532	0.0
*	M Q	9	6 s	9	A2o	8	a 2-1	nu4	1765.78507	-65.6	0.152E-03	2524.17689	758.38526	1.0
*	* Q	10	6 a	10	A2e	9	* * *	**	c1766.04922	0.0	0.650E-04	2721.71254	955.65077	0.0
	P R	5	3 s	6	A2e	4	s 2-1	nu4	1766.24330	13.6	0.715E-01	2030.75856	264.51662	1.0
	P R	5	2 a	6	Ee	10	a 1-1	nu4	1766.25300	28.3	0.512E-01	2049.86683	283.61666	1.0
*	N P	7	3 a	6	A2o	7	a 0 0	2nu2	c1766.46893	0.0	0.102E-04	2288.69027	522.22293	0.0
*	O Q	14	8 a	14	Ee	17	s 6 1	nu4	c1766.50665	0.0	0.242E-04	3598.22580	1831.74499	0.0
	R R	6	1 s	7	Ee	10	s 2 1	nu4	1766.74487	-29.9	0.164E-01	2179.37216	412.62430	1.0
*	* Q	10	8 s	10	Eo	10	* * *	**	c1766.79239	0.0	0.251E-03	2620.00139	853.21120	0.0
	R R	6	1 a	7	Eo	11	a 2 1	nu4	1767.39570	8.8	0.626E-02	2180.63260	413.23778	1.0
*	S R	9	3 a	10	A2o	5	s 5-1	nu4	1767.42150	-14.4	0.294E-02	2624.08137	856.65843	1.0
	R R	7	5 s	8	Ee	5	s 6 1	nu4	1767.51807	11.2	0.151E+00	2230.52999	463.01304	1.0
*	S R	8	2 s	9	Eo	10	a 4-1	nu4	1767.83630	0.9	0.209E-02	2465.23154	697.39533	1.0
*	O Q	10	9 s	10	A2e	3	a 7 1	nu4	1767.94800	-18.0	0.511E-03	2558.63033	790.68053	1.0
	Q R	8	7 a	9	Eo	3	s 7 0	2nu2	1768.16846	-5.5	0.106E+00	2301.83799	533.66898	1.0
	P R	5	3 a	6	A2o	4	a 2-1	nu4	1768.31130	43.7	0.617E-01	2033.53355	265.22662	1.0
*	M Q	11	6 a	11	A2e	10	s 2-1	nu4	c1768.45258	0.0	0.758E-04	2939.69214	1171.23532	0.0
	Q R	7	3 a	8	A2o	4	s 3 0	2nu2	1768.76807	22.9	0.792E-01	2290.98871	522.22293	1.0
*	U R	8	0 a	9	A2e	6	s 4 1	nu4	c1768.79151	0.0	0.373E-03	2481.14373	712.35318	0.0
	P R	5	4 s	6	Eo	6	s 3-1	nu4	1768.98120	0.8	0.183E-01	2007.63372	238.65260	1.0
*	T R	12	4 s	13	Eo	12	s 7 0	2nu2	c1769.30999	0.0	0.205E-04	3245.15807	1475.83298	0.0
*	M Q	10	6 s	10	A2o	8	a 2-1	nu4	c1770.28498	0.0	0.186E-03	2725.39127	955.10643	0.0
	P R	5	4 a	6	Ee	7	a 3-1	nu4	1770.31152	14.5	0.157E-01	2009.71830	239.40823	1.0
*	T R	11	3 s	12	A2e	6	s 6 0	2nu2	c1770.39097	0.0	0.952E-04	3037.32425	1266.93735	0.0
*	O Q	9	9 a	9	A2o	3	s 7 1	nu4	1770.40680	-0.6	0.765E-03	2363.90992	593.50306	1.0
	R R	8	8 a	9	Ee	3	a 9 1	nu4	1770.49817	4.2	0.135E+00	2248.64641	478.14866	1.0
*	S R	10	4 a	11	Ee	10	s 6-1	nu4	1771.02541	-11.7	0.882E-03	2798.56207	1027.53549	1.0
*	O R	5	2 a	6	Ee	11	s 0 1	nu4	1771.16320	37.3	0.197E-02	2054.77613	283.61666	1.0
*	T R	10	2 s	11	Eo	12	s 5 0	2nu2	c1771.24057	0.0	0.995E-04	2841.19156	1069.94630	0.0
	P R	5	5 s	6	Ee	5	s 4-1	nu4	1771.39180	-6.2	0.649E-02	1976.66152	205.26910	1.0
*	N Q	11	8 s	11	Eo	12	s 5 0	2nu2	c1771.41539	0.0	0.948E-04	2841.19156	1069.77148	0.0
*	S R	9	3 s	10	A2e	5	a 5-1	nu4	1771.58750	12.5	0.283E-02	2627.76507	856.17882	1.0
*	O Q	11	9 s	11	A2e	4	a 7 1	nu4	1771.69740	-25.7	0.431E-03	2779.50839	1007.80842	1.0
*	* R	9	1 s	10	Ee	11	* * *	**	c1772.21363	0.0	0.181E-03	2657.12980	884.91558	0.0
	P R	5	5 a	6	Eo	5	a 4-1	nu4	1772.22450	-3.2	0.563E-02	1978.31225	206.08743	1.0
	R R	7	5 a	8	Eo	6	a 6 1	nu4	1772.33142	-3.5	0.683E-01	2236.03878	463.70701	1.0
	Q R	7	2 a	8	Ee	9	s 2 0	2nu2	1772.35000	33.9	0.275E-01	2312.76829	540.42168	1.0
*	O R	4	3 s	5	A2e	5	a 1 1	nu4	1772.81110	113.5	0.155E-02	1938.13083	165.33108	0.0
*	S R	7	1 a	8	Eo	10	s 3 1	nu4	1773.00520	-51.1	0.354E-03	2324.33065	551.32034	1.0
*	* Q	13	5 s	13	Ee	25	* * *	**	n1773.01278	0.0	0.107E-04	3469.65459	1696.64181	0.0
*	O Q	10	9 a	10	A2o	4	s 7 1	nu4	1773.25390	-5.1	0.875E-03	2564.74235	791.48794	1.0
	R R	7	4 s	8	Eo	7	s 5 1	nu4	1774.24219	2.9	0.876E-01	2270.27698	496.03508	1.0
*	R R	7	2 a	8	Ee	10	a 3-1	nu4	c1774.27965	0.0	0.250E-04	2314.70076	540.42168	0.0
*	M Q	7	7 a	7	Eo	8	s 3-1	nu4	c1774.28390	0.0	0.118E-04	2149.39043	375.10677	0.0
*	S R	11	5 a	12	Eo	10	s 7-1	nu4	1774.49560	-7.1	0.477E-03	2985.00837	1210.51206	1.0
	Q R	7	1 a	8	Eo	11	s 1 0	2nu2	1774.71250	69.8	0.211E-01	2326.02586	551.32034	1.0
	R R	8	7 s	9	Ee	4	s 8 1	nu4	1774.85840	10.4	0.171E+00	2307.75139	532.89403	1.0
*	S R	10	4 s	11	Eo	9	a 6-1	nu4	1775.18620	-44.1	0.844E-03	2802.26909	1027.07848	1.0
	R R	9	9 a	10	A2o	1	a10 1	nu4	1775.26781	85.7	0.236E+00	2368.76230	593.50306	1.0
*	O Q	12	9 s	12	A2e	5	a 7 1	nu4	1775.39960	23.7	0.267E-03	3019.16437	1243.76714	1.0
*	Q R	6	1 a	7	Eo	12	s 1-1	nu4	1775.45990	-17.7	0.282E-02	2188.69945	413.23778	1.0
	Q R	8	6 a	9	A2e	2	s 6 0	2nu2	1775.55872	-6.5	0.136E+00	2357.03012	581.47075	1.0
*	M Q	12	6 a	12	A2e	11	s 2-1	nu4	c1775.72124	0.0	0.418E-04	3181.28151	1405.56243	0.0
*	O Q	11	9 a	11	A2o	5	s 7 1	nu4	1776.00210	-0.3	0.609E-03	2784.51339	1008.51126	1.0
*	S R	7	1 s	8	Ee	11	a 3 1	nu4	1776.12820	11.5	0.258E-03	2326.88564	550.75859	1.0
*	O R	5	2 s	6	Eo	11	a 0 1	nu4	1776.20390	36.8	0.142E-02	2059.13736	282.93714	1.0
*	N Q	12	8 s	12	Eo	14	s 5 0	2nu2	c1776.86144	0.0	0.235E-04	3081.95488	1305.12737	0.0

* Q R	6	2 a	7	Ee	10	s 2 1	nu4	1777.09112	-32.9	0.109E-03	2179.37216	402.27775	1.0
* M Q	8	7 a	8	Eo	9	s 3-1	nu4	1777.45501	16.4	0.312E-04	2311.12235	533.66898	1.0
* S R	12	6 a	13	A2e	5	s 8-1	nu4	1777.82590	-4.6	0.470E-03	3183.38879	1405.56243	1.0
* M Q	11	6 s	11	A2o	10	a 2-1	nu4	1777.86318	164.5	0.101E-03	2948.60757	1170.76084	1.0
* M Q	7	7 s	7	Ee	8	a 3-1	nu4	c1777.87601	0.0	0.184E-04	2152.12347	374.24900	0.0
Q P	5	0 s	4	A2o	5	a 0 0	2nu2	1778.23880	-21.4	0.638E-02	2075.88270	297.64176	0.0
Q P	5	1 s	4	Ee	9	a 1 0	2nu2	1778.39720	-0.6	0.311E-02	2072.36552	293.96826	1.0
R R	7	4 a	8	Ee	7	a 5 1	nu4	1778.51843	0.6	0.367E-01	2275.19451	496.67614	1.0
* O Q	9	9 s	9	A2e	3	a 7 1	nu4	c1778.53919	0.0	0.418E-03	2371.12655	592.58650	0.0
* O Q	12	9 a	12	A2o	6	s 7 1	nu4	1778.59970	-4.3	0.323E-03	3022.97191	1244.37178	1.0
* S R	11	5 s	12	Ee	11	a 7-1	nu4	1778.69890	23.7	0.459E-03	2988.77752	1210.08099	1.0
* O Q	13	9 s	13	A2e	6	a 7 1	nu4	1778.80629	139.0	0.130E-03	3277.13487	1498.34248	1.0
* * Q	13	6 a	13	A2e	11	* * *	**	n1778.87142	0.0	0.150E-04	3437.29847	1658.42705	0.0
Q P	5	2 s	4	Eo	9	a 2 0	2nu2	1778.87640	-3.3	0.285E-02	2061.81387	282.93714	1.0
* Q R	6	2 s	7	Eo	11	a 2 1	nu4	1778.98696	21.9	0.474E-04	2180.63260	401.64783	1.0
* U R	12	3 a	13	A2o	7	s 7 1	nu4	c1779.10765	0.0	0.180E-04	3279.87606	1500.76522	0.0
* O R	4	4 a	5	Ee	7	s 2 1	nu4	1779.32700	9.6	0.281E-03	1919.48926	140.16322	0.0
Q P	5	3 s	4	A2e	4	a 3 0	2nu2	c1779.71176	0.0	0.469E-02	2044.22762	264.51662	0.0
R R	9	9 s	10	A2e	1	s10 1	nu4	1779.72907	-29.4	0.378E+00	2372.31851	592.58650	1.0
R R	7	3 s	8	A2e	5	s 4 1	nu4	1779.96570	-10.7	0.956E-01	2301.58870	521.62193	1.0
* Q R	6	1 s	7	Ee	11	a 1-1	nu4	1780.53440	-7.5	0.234E-02	2193.15945	412.62430	1.0
Q P	5	4 s	4	Eo	8	a 4 0	2nu2	1780.95801	32.5	0.147E-02	2019.60736	238.65260	0.0
* O Q	13	9 a	13	A2o	7	s 7 1	nu4	c1781.01628	0.0	0.141E-03	3279.87606	1498.85659	0.0
* S R	13	7 a	14	Eo	10	s 9-1	nu4	c1781.02171	0.0	0.106E-03	3393.66757	1612.65277	0.0
R R	8	7 a	9	Eo	4	a 8 1	nu4	1781.02588	-17.8	0.682E-01	2314.69664	533.66898	1.0
* M Q	9	7 a	9	Eo	11	s 3-1	nu4	c1781.13450	0.0	0.435E-04	2492.68147	711.54796	0.0
* O R	5	3 s	6	A2e	5	a 1 1	nu4	1781.56170	-69.7	0.413E-02	2046.08529	264.51662	1.0
* O R	4	4 s	5	Eo	7	a 2 1	nu4	1781.62241	-38.8	0.245E-03	1920.98430	139.35801	1.0
* O Q	14	9 s	14	A2e	7	a 7 1	nu4	c1781.79381	0.0	0.519E-04	3553.07739	1771.31036	0.0
* M Q	8	7 s	8	Ee	10	a 3-1	nu4	c1781.80730	0.0	0.465E-04	2314.70076	532.89403	0.0
* S R	12	6 s	13	A2o	6	a 8-1	nu4	1782.04720	2.1	0.453E-03	3187.20076	1405.15377	1.0
Q R	8	5 a	9	Eo	7	s 5 0	2nu2	1782.28821	-4.3	0.435E-01	2403.98157	621.69293	1.0
* N R	5	4 s	6	Eo	7	s 1 0	2nu2	c1782.36602	0.0	0.514E-04	2021.01734	238.65260	0.0
* U R	11	2 a	12	Ee	13	s 6 1	nu4	c1783.01574	0.0	0.202E-04	3067.98073	1284.96524	0.0
R R	8	6 a	9	A2o	3	a 7 1	nu4	1783.13147	11.8	0.199E+00	2363.90992	580.77963	1.0
* N Q	10	9 s	10	A2e	4	s 6 0	2nu2	c1783.14319	0.0	0.379E-03	2573.82086	790.68053	0.0
R R	7	3 a	8	A2o	5	a 4 1	nu4	1783.22290	8.7	0.366E-01	2305.44496	522.22293	1.0
* O Q	14	9 a	14	A2o	8	s 7 1	nu4	n1783.25318	0.0	0.525E-04	3554.99555	1771.74237	0.0
* O Q	10	10 s	10	Eo	4	a 8 1	nu4	1783.38426	-35.1	0.123E-03	2503.56687	720.17910	1.0
R R	9	8 a	10	Ee	4	a 9 1	nu4	1783.78321	19.3	0.721E-01	2440.21673	656.43545	1.0
* S R	8	1 a	9	Eo	11	a 3-1	nu4	1783.93580	9.3	0.154E-02	2492.68147	708.74660	1.0
* S R	14	8 a	15	Ee	10	s10-1	nu4	c1784.07140	0.0	0.444E-04	3615.80435	1831.74499	0.0
* O Q	15	9 s	15	A2e	8	a 7 1	nu4	c1784.37627	0.0	0.176E-04	3846.76937	2062.43817	0.0
* N R	6	3 s	7	A2e	5	s 0 0	2nu2	1784.47977	181.2	0.105E-02	2167.78007	383.31842	0.0
R R	7	2 s	8	Eo	10	s 3 1	nu4	1784.48206	-36.9	0.202E-01	2324.33065	539.84490	1.0
* M Q	12	6 a	12	A2o	10	a 2-1	nu4	n1784.63966	0.0	0.517E-04	3189.79343	1405.15377	0.0
P R	6	1 s	7	Ee	12	s 0 1	nu4	1784.87730	37.1	0.580E-01	2197.49789	412.62430	1.0
* S R	7	0 s	8	A2o	6	a 2-1	nu4	1784.95060	-47.8	0.605E-02	2339.34844	554.39306	0.0
* S R	13	7 s	14	Ee	10	a 9-1	nu4	1785.27047	-4.6	0.103E-03	3397.53433	1612.26340	1.0
* M Q	10	7 a	10	Eo	13	s 3-1	nu4	c1785.29427	0.0	0.415E-04	2693.86729	908.57496	0.0
* O Q	15	9 a	15	A2o	9	s 7 1	nu4	c1785.30938	0.0	0.171E-04	3848.11122	2062.79689	0.0
Q R	9	9 a	10	A2o	2	s 9 0	2nu2	1785.82077	-5.5	0.143E+00	2379.32438	593.50306	1.0
* P R	7	2 s	8	A2o	2	s 1 0	2nu2	1786.18780	68.4	0.174E-02	2326.02586	539.84490	1.0
* M Q	9	7 s	9	Ee	12	a 3-1	nu4	c1786.44699	0.0	0.612E-04	2497.30418	710.85630	0.0
R R	7	2 a	8	Ee	11	a 3 1	nu4	1786.46460	6.4	0.753E-02	2326.88564	540.42168	1.0
* O Q	11	10 s	11	Eo	6	a 8 1	nu4	1786.88925	-30.0	0.151E-03	2724.85048	937.95823	1.0
* U R	10	1 a	11	Eo	13	s 5 1	nu4	c1786.90870	0.0	0.406E-04	2867.93460	1081.02772	0.0
P R	6	2 s	7	Eo	12	s 1-1	nu4	1787.05040	-12.2	0.409E-01	2188.69945	401.64783	1.0
R R	7	1 s	8	Ee	12	s 2 1	nu4	1787.71375	-3.0	0.551E-02	2338.47264	550.75859	1.0
* N Q	11	9 s	11	A2e	5	s 6 0	2nu2	1788.07442	27.0	0.190E-03	2795.88014	1007.80842	1.0
* S R	9	2 a	10	Ee	12	s 4-1	nu4	1788.13290	2.9	0.112E-02	2662.74905	874.61644	1.0
Q R	8	4 a	9	Ee	8	s 4 0	2nu2	1788.20190	4.2	0.281E-01	2442.65175	654.45027	1.0
* O Q	10	10 a	10	Ee	6	s 8 1	nu4	c1788.30222	0.0	0.214E-03	2509.43447	721.13324	0.0
R R	7	1 a	8	Eo	12	a 2 1	nu4	1788.31390	28.3	0.140E-02	2339.63141	551.32034	1.0
* S R	14	8 s	15	Eo	11	a10-1	nu4	n1788.37089	0.0	0.430E-04	3619.74305	1831.37216	0.0
* S R	8	1 s	9	Ee	12	a 3-1	nu4	1789.06420	-15.0	0.150E-02	2497.30418	708.23848	1.0
R R	6	0 a	7	A2e	7	a 1 1	nu4	1789.32874	-4.6	0.805E-01	2206.21694	416.88774	1.0
P R	6	3 s	7	A2e	6	s 2-1	nu4	1789.49646	39.3	0.518E-01	2172.81095	383.31842	1.0
R R	10	10 a	11	Ee	1	a11 1	nu4	1789.62910	151.2	0.744E-01	2510.74722	721.13324	1.0
R R	8	6 a	9	A2e	3	a 7 1	nu4	1789.65540	-4.0	0.702E-01	2371.12655	581.47075	1.0
R R	9	8 s	10	Eo	3	s 9 1	nu4	1789.72911	4.6	0.105E+00	2445.37497	655.64632	1.0
P R	6	1 a	7	Eo	13	a 0 1	nu4	1789.75050	-7.3	0.369E-01	2202.98901	413.23778	1.0
* M Q	11	7 a	11	Eo	15	s 3-1	nu4	c1789.83400	0.0	0.297E-04	2914.40214	1124.56715	0.0
R R	8	5 s	9	Ee	7	s 6 1	nu4	1790.38440	8.2	0.575E-01	2411.44913	621.06555	1.0
* O Q	12	10 s	12	Eo	8	a 8 1	nu4	1790.57531	-5.3	0.111E-03	2965.18390	1174.60806	1.0
P R	6	2 a	7	Ee	11	a 1-1	nu4	1790.88185	1.5	0.292E-01	2193.15945	402.27775	1.0
* O Q	11	10 a	11	Ee	7	s 8 1	nu4	1791.33900	11.0	0.223E-03	2730.12612	938.78822	1.0
* M Q	10	7 s	10	Ee	14	a 3-1	nu4	c1791.73062	0.0	0.542E-04	2699.70024	907.96503	0.0
P R	6	4 s	7	Eo	8	s 3-1	nu4	1791.80664	3.9	0.157E-01	2149.39043	357.58418	1.0
* O R	5	3 a	6	A2o	5	s 1 1	nu4	1791.92250	67.9	0.232E-02	2057.14233	265.22662	1.0
R R	9	7 a	10	Eo	4	a 8 1	nu4	1792.01752	-13.9	0.448E-01	2503.56687	711.54796	1.0
P R	6	3 a	7	A2o	5	a 2-1	nu4	1792.03300	29.3	0.367E-01	2176.00752	383.97745	1.0
* M R	4	4 a	5	Ee	9	s 0 1	nu4	c1792.12368	0.0	0.275E-04	1932.28288	140.16322	0.0
* S R	10	3 a	11	A2o	6	s 5-1	nu4	1792.18630	-0.5	0.136E-02	2844.73618	1052.54983	1.0
Q R	8	3 a	9	A2o	5	s 3 0	2nu2	1793.17310	11.4	0.368E-01	2473.00867	679.83671	1.0
* M Q	13	6 s	13	A2o	12	a 2-1	nu4	c1793.26706	0.0	0.206E-04	3451.35746	1658.07925	0.0
* S R	9	2 s	10	Eo	12	a 4-1	nu4	1793.28630	-20.6	0.105E-02	2667.43865	874.15029	1.0
* N Q	12	9 s	12	A2e	6	s 6 0	2nu2	c1793.56118	0.0	0.630E-04	3037.32425	1243.76714	0.0
R R	10	10 s	11	Eo	2	s11 1	nu4	1793.76174	-37.2	0.111E+00	2513.94456	720.17910	1.0
P R	6	4 a	7	Ee	8	a 3-1	nu4	1793.84009	11.1	0.128E-01	2152.12347	358.28449	1.0
P R	6	5 s	7	Ee	6	s 4-1	nu4	1794.03003	-4.2	0.835E-02	2118.39941	324.36891	1.0
* O Q	13	10 s	13	Eo	10	a 8 1	nu4	1794.16496	69.5	0.606E-04	3224.06858	1429.91057	1.0
* O Q	12	10 a	12	Ee	10	s 8 1	nu4	1794.23660	1.2	0.142E-03	2969.55808	1175.32160	1.0
* M Q	12	7 a	12	Eo	18	s 3-1	nu4	c1794.53530	0.0	0.160E-04	3153.86733	1359.32885	0.0
* O R	6	2 a	7	Ee	12	s 0 1	nu4	1795.22280	26.6	0.146E-02	2197.49789	402.27775	1.0
P R	6	5 a	7	Eo	7	a 4-1	nu4	1795.40955	12.5	0.701E-02	2120.53549	325.12719	1.0
P R	6	6 s	7	A2o	2	s 5-1	nu4	1796.01860	17.4	0.622E-02	2079.59121	283.57435	1.0
* S R	11	4 a	12	Ee	12	s 6-1	nu4	1796.11530	12.7	0.365E-03	3038.61908	1242.50505	1.0
* M R	4	4 s	5	Eo	9	a 0 1	nu4	c1796.26402	0.0	0.375E-04	1935.61671	139.35801	0.0
* * R	8	5 a	9	Eo	8	* * *	**	1796.61328	-9.8	0.179E-01	2418.30719	621.69293	1.0
R R	8	4 s	9	Eo	9	s 5 1	nu4	1796.63904	10.2	0.325E-01	2450.50862	653.87060	1.0
P R	6	6 a	7	A2e	3	a 5-1	nu4	1796.86340	4.7	0.529E-02	2081.27306	284.41013	1.0
* * R	9	0 s	10	A2o	7	* * *	**	c1796.88039	0.0	0.729E-03	2685.38002	888.50072	0.0
* T R	10	1 s	11	Ee	13	s 4 0	2nu2	1796.92259	201.7	0.104E-03	2877.52928	1080.62686	0.0
* O Q	13	10 a	13	Ee	12	s 8 1	nu4	1796.94920	-14.6	0.689E-04	3227.46757	1430.51691	1.0
Q R	8	2 a	9	Ee	11	s 2 0	2nu2	1797.05640	-0.1	0.124E-01	2494.97342	697.91701	1.0
Q R	9	8 a	10	Ee	5	s 8 0	2nu2	1797.32965	-31.0	0.348E-01	2453.76820	656.43545	1.0
* S R	10	3 s	11	A2e	6	a 5-1	nu4	1797.36340	-8.4	0.127E-02	2849.47064	1052.10640	1.0

* M Q	11	7 s	11	Ee	16	a 3-1	nu4	c1797.36393	0.0	0.336E-04	2921.41309	1124.03568	0.0
* T R	11	2 s	12	Eo	14	s 5 0	2nu2	c1797.38248	0.0	0.499E-04	3081.95488	1284.60633	0.0
* O Q	14	10 s	14	Eo	12	a 8 1	nu4	n1797.43435	0.0	0.263E-04	3501.07234	1703.63799	0.0
* T R	12	3 s	13	A2e	7	s 6 0	2nu2	c1797.71461	0.0	0.425E-04	3298.09124	1500.40405	0.0
* * R	8	1 s	9	Ee	13	* * *	**	1797.80000	25.0	0.213E-03	2506.03598	708.23848	1.0
* Q R	7	2 a	8	Ee	12	s 2 1	nu4	1798.05064	-3.2	0.166E-03	2338.47264	540.42168	1.0
* N Q	10	10 s	10	Eo	5	s 7 0	2nu2	1798.29085	-1.8	0.980E-04	2518.47013	720.17910	1.0
R R	9	7 s	10	Ee	6	s 8 1	nu4	1798.57982	16.5	0.597E-01	2509.43447	710.85630	1.0
R R	10	9 a	11	A2o	2	a10 1	nu4	1798.90490	40.8	0.873E-01	2590.38876	791.48794	1.0
* R R	8	2 a	9	Ee	12	a 3-1	nu4	c1799.38628	0.0	0.314E-04	2497.30418	697.91701	0.0
* O Q	14	10 a	14	Ee	14	s 8 1	nu4	c1799.44831	0.0	0.276E-04	3503.60181	1704.14728	0.0
R R	9	6 a	10	A2e	3	a 7 1	nu4	1799.62440	-36.0	0.563E-01	2558.63033	759.00233	1.0
* Q R	7	1 a	8	Eo	13	s 1-1	nu4	1799.69950	-49.4	0.177E-02	2351.02478	551.32034	0.0
Q R	8	1 a	9	Eo	13	s 1 0	2nu2	1799.69982	11.2	0.934E-02	2508.44530	708.74660	1.0
* N Q	13	9 s	13	A2e	7	s 6 0	2nu2	c1799.77618	0.0	0.145E-04	3298.09124	1498.34248	0.0
* Q R	7	2 s	8	Eo	12	a 2 1	nu4	c1799.79019	0.0	0.105E-03	2339.63141	539.84490	0.0
* S R	12	5 a	13	Eo	11	s 7-1	nu4	1799.89300	17.1	0.178E-03	3244.36788	1444.47659	1.0
Q P	4	1 s	3	Ee	7	a 1 0	2nu2	1800.00210	-9.6	0.301E-02	1994.90937	194.90631	0.0
* O R	5	4 a	6	Ee	9	s 2 1	nu4	1800.26390	-42.0	0.591E-03	2039.67633	239.40823	1.0
Q R	8	0 a	9	A2e	7	s 0 0	2nu2	1800.50770	19.9	0.139E-01	2512.85889	712.35318	1.0
Q P	4	2 s	3	Eo	7	a 2 0	2nu2	1800.52460	-2.8	0.252E-02	1984.35396	183.82908	1.0
* O R	6	3 a	7	A2o	6	s 1 1	nu4	1800.72424	-56.1	0.636E-02	2184.70730	383.97745	0.0
Q R	10	10 a	11	Ee	2	s10 0	2nu2	1800.84596	-10.7	0.368E-01	2521.98027	721.13324	1.0
* O R	6	2 s	7	Eo	13	a 0 1	nu4	1801.34080	-3.8	0.114E-02	2202.98901	401.64783	1.0
* S R	11	4 s	12	Eo	12	a 6-1	nu4	1801.35640	77.4	0.339E-03	3043.45519	1242.10653	1.0
Q P	4	3 s	3	A2e	4	a 3 0	2nu2	1801.43130	4.7	0.318E-02	1966.76191	165.33108	1.0
* O Q	11	11 s	11	Ee	5	a 9 1	nu4	1801.81500	-22.5	0.722E-04	2661.81799	860.00074	1.0
R R	8	3 s	9	A2e	6	s 4 1	nu4	1801.85718	13.1	0.339E-01	2481.14373	679.28786	1.0
* * R	8	4 a	9	Ee	9	* * *	**	1801.97046	10.1	0.875E-02	2456.41972	654.45027	1.0
* * Q	12	7 s	12	Ee	18	* * *	**	n1802.11195	0.0	0.100E-04	3160.98317	1358.87122	0.0
* O R	5	4 s	6	Eo	9	a 2 1	nu4	1802.40560	-11.3	0.506E-03	2041.05933	238.65260	1.0
* N R	5	5 s	6	Ee	6	s 2 0	2nu2	c1802.78716	0.0	0.220E-04	2008.05676	205.26910	0.0
* N Q	11	10 s	11	Eo	7	s 7 0	2nu2	c1803.52453	0.0	0.796E-04	2741.48040	937.95823	0.0
* S R	13	6 a	14	A2e	6	s 8-1	nu4	c1803.52550	0.0	0.159E-03	3461.94911	1658.42705	0.0
R R	11	11 a	12	Eo	2	a12 1	nu4	1803.61074	231.9	0.424E-01	2664.58612	860.99857	1.0
* S R	8	0 a	9	A2e	8	s 2-1	nu4	1804.38480	77.5	0.697E-02	2516.73023	712.35318	1.0
R R	10	9 s	11	A2e	2	s10 1	nu4	1804.42169	7.0	0.120E+00	2595.10152	790.68053	1.0
* S R	12	5 s	13	Ee	13	a 7-1	nu4	c1805.13473	0.0	0.167E-03	3249.21143	1444.10524	0.0
* M Q	9	8 a	9	Ee	10	s 4-1	nu4	c1805.15771	0.0	0.157E-04	2461.59358	656.43545	0.0
* O Q	12	11 s	12	Ee	7	a 9 1	nu4	1805.34350	-47.8	0.786E-04	2902.78534	1097.43706	1.0
* M Q	8	8 s	8	Eo	8	a 4-1	nu4	c1805.61579	0.0	0.101E-04	2282.87892	477.26409	0.0
* * R	8	3 a	9	A2o	6	* * *	**	1805.74451	3.5	0.777E-02	2485.58087	679.83671	1.0
* N R	6	4 s	7	Eo	9	s 1 0	2nu2	1805.80760	18.9	0.780E-04	2163.38989	357.58418	1.0
R R	8	2 s	9	Eo	12	s 3 1	nu4	1805.86816	0.3	0.706E-02	2503.26346	697.39533	1.0
* Q R	7	1 s	8	Ee	13	a 1-1	nu4	1805.91670	-38.0	0.116E-02	2356.67909	550.75859	1.0
* O Q	11	11 a	11	Eo	5	s 9 1	nu4	1806.06890	10.6	0.112E-03	2667.06641	860.99857	1.0
R R	9	6 s	10	A2o	4	s 7 1	nu4	1806.35780	7.1	0.683E-01	2564.74235	758.38526	1.0
R R	9	5 a	10	Eo	9	a 6 1	nu4	1806.47480	-14.6	0.178E-01	2605.41109	798.93483	1.0
Q R	9	7 a	10	Eo	5	s 7 0	2nu2	1806.92051	-16.6	0.167E-01	2518.47013	711.54796	1.0
* S R	14	7 a	15	Eo	12	s 9-1	nu4	c1807.00953	0.0	0.325E-04	3691.32463	1884.32138	0.0
R R	11	11 s	12	Ee	2	s12 1	nu4	1807.59558	-41.2	0.608E-01	2667.60044	860.00074	1.0
R R	10	8 a	11	Ee	5	a 9 1	nu4	1807.90961	-16.2	0.263E-01	2661.81799	853.90676	1.0
* * R	8	2 a	9	Ee	13	* * *	**	1808.12150	25.3	0.129E-02	2506.03598	697.91701	1.0
* S R	9	1 a	10	Eo	13	s 3-1	nu4	1808.49930	16.5	0.791E-03	2693.86729	885.36964	1.0
R R	8	1 s	9	Ee	14	s 2 1	nu4	1808.63900	27.2	0.163E-02	2516.87476	708.23848	1.0
* S R	13	6 s	14	A2o	7	a 8-1	nu4	c1808.76758	0.0	0.150E-03	3466.84332	1658.07925	0.0
R R	7	0 s	8	A2o	7	s 1 1	nu4	1808.83313	11.8	0.599E-01	2363.22501	554.39306	1.0
* M Q	10	8 a	10	Ee	12	s 4-1	nu4	c1808.84286	0.0	0.200E-04	2662.74905	853.90676	0.0
* O Q	13	11 s	13	Ee	9	a 9 1	nu4	c1809.00913	0.0	0.514E-04	3162.57624	1353.56634	0.0
* N Q	12	10 s	12	Eo	9	s 7 0	2nu2	c1809.13875	0.0	0.361E-04	2983.73131	1174.60806	0.0
* U R	11	1 a	12	Eo	15	s 5 1	nu4	c1809.16973	0.0	0.220E-04	3104.71571	1295.54540	0.0
* * R	8	1 a	9	Eo	14	* * *	**	1809.25610	59.2	0.121E-03	2517.99678	708.74660	1.0
* O Q	12	11 a	12	Eo	7	s 9 1	nu4	1809.26930	1.7	0.106E-03	2907.56331	1098.29418	1.0
P R	7	1 s	8	Ee	14	s 0 1	nu4	1809.49231	3.1	0.271E-01	2360.25059	550.75859	1.0
* M Q	9	8 s	9	Eo	10	a 4-1	nu4	c1809.58499	0.0	0.233E-04	2465.23154	655.64632	0.0
* P R	8	2 s	9	Eo	13	s 1 0	2nu2	1811.05061	6.4	0.273E-03	2508.44530	697.39533	1.0
P R	7	2 s	8	Eo	13	s 1-1	nu4	1811.17761	-22.7	0.210E-01	2351.02478	539.84490	1.0
* O Q	13	11 a	13	Eo	9	s 9 1	nu4	c1812.28992	0.0	0.619E-04	3166.58558	1354.29410	0.0
* S R	14	7 s	15	Ee	12	a 9-1	nu4	c1812.29258	0.0	0.308E-04	3696.28852	1883.99402	0.0
R R	9	4 a	10	Ee	10	a 5 1	nu4	1812.49880	-15.6	0.113E-01	2643.95837	831.45801	1.0
* O Q	14	11 s	14	Ee	11	a 9 1	nu4	n1812.53218	0.0	0.251E-04	3440.68864	1628.15646	0.0
* U R	10	0 a	11	A2e	8	s 4 1	nu4	1812.57810	64.0	0.170E-03	2897.15290	1084.58120	1.0
P R	7	3 s	8	A2e	6	s 2-1	nu4	1812.68396	28.9	0.258E-01	2334.30300	521.62193	1.0
* M Q	11	8 a	11	Ee	14	s 4-1	nu4	c1812.97169	0.0	0.175E-04	2883.34833	1070.37730	0.0
* S R	10	2 a	11	Ee	14	s 4-1	nu4	1812.99110	5.8	0.512E-03	2883.34833	1070.35781	1.0
R R	9	5 s	10	Ee	9	s 6 1	nu4	1813.11429	10.4	0.194E-01	2611.48776	798.37451	1.0
Q R	10	9 a	11	A2o	3	s 9 0	2nu2	1813.34942	-41.4	0.343E-01	2604.84150	791.48794	1.0
R R	11	10 a	12	Ee	3	a11 1	nu4	1813.61910	62.3	0.240E-01	2752.40109	938.78822	1.0
R R	10	8 s	11	Eo	5	s 9 1	nu4	1813.85597	7.6	0.332E-01	2667.06641	853.21120	1.0
* M Q	10	8 s	10	Eo	12	a 4-1	nu4	c1814.22552	0.0	0.283E-04	2667.43865	853.21120	0.0
* S R	9	1 s	10	Ee	14	a 3-1	nu4	1814.78130	-33.6	0.738E-03	2699.70024	884.91558	1.0
Q R	9	6 a	10	A2e	4	s 6 0	2nu2	1814.81840	-1.3	0.156E-01	2573.82086	759.00233	1.0
* O Q	14	11 a	14	Eo	11	s 9 1	nu4	c1815.08775	0.0	0.275E-04	3443.86017	1628.76733	0.0
P R	7	4 s	8	Eo	9	s 3-1	nu4	1815.08838	11.1	0.990E-02	2311.12235	496.03508	1.0
* N Q	13	10 s	13	Eo	12	s 7 0	2nu2	c1815.23240	0.0	0.113E-04	3245.15807	1429.91057	0.0
* M R	5	4 a	6	Ee	11	s 0 1	nu4	1815.37405	61.5	0.898E-04	2054.77613	239.40823	1.0
Q R	11	11 a	12	Eo	3	s11 0	2nu2	1815.51064	-7.0	0.185E-01	2676.50991	860.99857	1.0
P R	7	1 a	8	Eo	15	a 0 1	nu4	1815.62585	-52.0	0.151E-01	2366.95139	551.32034	1.0
* S R	9	1 a	10	Eo	14	s 3 1	nu4	c1815.85417	0.0	0.276E-04	2701.22095	885.36964	0.0
P R	7	2 a	8	Ee	13	a 1-1	nu4	1816.25360	-38.1	0.134E-01	2356.67909	540.42168	1.0
R R	10	7 a	11	Eo	6	a 8 1	nu4	1816.27163	-38.9	0.161E-01	2724.85048	908.57496	1.0
P R	7	5 s	8	Ee	8	s 4-1	nu4	1817.07544	3.4	0.638E-02	2280.08814	463.01304	1.0
P R	7	3 a	8	A2o	6	a 2-1	nu4	1817.12341	-21.0	0.210E-01	2339.34844	522.22293	1.0
R R	12	12 a	13	A2e	1	a13 1	nu4	1817.25290	328.3	0.441E-01	2830.27467	1013.05460	1.0
* S R	11	3 a	12	A2o	7	s 5-1	nu4	1817.34330	9.4	0.556E-03	3084.63133	1267.28897	1.0
* M Q	12	8 a	12	Ee	16	s 4-1	nu4	c1817.48809	0.0	0.117E-04	3123.13837	1305.64882	0.0
* O Q	15	11 a	15	Eo	13	s 9 1	nu4	c1817.64051	0.0	0.101E-04	3739.12523	1921.47393	0.0
R R	9	3 a	10	A2o	6	a 4 1	nu4	1817.65290	-37.5	0.145E-01	2674.31508	856.65843	1.0
* N Q	11	11 s	11	Ee	6	s 8 0	2nu2	c1817.86626	0.0	0.447E-04	2677.86748	860.00074	0.0
P R	7	4 a	8	Ee	10	a 3-1	nu4	1818.02539	7.7	0.748E-02	2314.70076	496.67614	1.0
* O R	5	5 a	6	Eo	8	s 3 1	nu4	1818.26970	-8.3	0.186E-03	2024.35796	206.08743	1.0
R R	9	4 s	10	Eo	11	s 5 1	nu4	1818.86006	16.2	0.107E-01	2649.79863	830.94019	1.0
P R	7	6 s	8	A2o	3	s 5-1	nu4	1818.87740	-13.5	0.715E-02	2241.33686	422.45811	1.0
R R	11	10 s	12	Eo	4	s11 1	nu4	1818.92908	12.2	0.319E-01	2756.88609	937.95823	1.0
* Q R	8	2 a	9	Ee	14	s 2 1	nu4	c1818.96077	0.0	0.177E-03	2516.87476	697.91701	0.0
P R	7	5 a	8	Eo	8	a 4-1	nu4	1819.17330	13.9	0.509E-02	2282.87892	463.70701	1.0
* S R	10	2 s	11	Eo	14	a 4-1	nu4	1819.34350	-14.0	0.468E-03	2889.29120	1069.94630	1.0
* M Q	11	8 s	11	Eo	14	a 4-1	nu4	c1819.51859	0.0	0.236E-04	2889.29120	1069.77148	0.0

*	O R	7	2 a	8	Ee	14	s 0 1	nu4	1819.82930	3.9	0.868E-03	2360.25059	540.42168	1.0
*	* R	9	1 s	10	Ee	15	* * *	**	c1819.85048	0.0	0.158E-03	2704.76900	884.91558	0.0
*	O Q	12	12 s	12	A2o	2	a10 1	nu4	c1819.85693	0.0	0.756E-04	2831.86702	1012.00638	0.0
	P R	7	6 a	8	A2e	4	a 5-1	nu4	1820.29183	16.1	0.588E-02	2243.51303	423.22281	1.0
	P R	7	7 s	8	Ee	4	s 6-1	nu4	1820.48290	-6.1	0.140E-02	2194.73251	374.24900	1.0
*	M R	5	4 s	6	Eo	11	a 0 1	nu4	c1820.48876	0.0	0.109E-03	2059.13736	238.65260	0.0
*	* R	8	2 s	9	Eo	14	* * *	**	1820.60690	54.5	0.132E-03	2517.99678	697.39533	1.0
*	* R	9	5 a	10	Eo	10	* * *	**	1821.07240	58.4	0.342E-02	2620.00139	798.93483	0.0
	Q P	3	0 s	2	A2o	3	a 0 0	2nu2	1821.07349	-17.4	0.524E-02	1940.31307	119.23784	1.0
*	O R	6	4 a	7	Ee	10	s 2 1	nu4	1821.08570	-19.7	0.725E-03	2179.37216	358.28449	1.0
	R R	12	12 s	13	A2o	1	s13 1	nu4	1821.22458	-31.9	0.622E-01	2833.23415	1012.00638	1.0
	Q P	3	1 s	2	Ee	5	a 1 0	2nu2	1821.25610	-10.1	0.236E-02	1936.79372	115.53661	1.0
	P R	7	7 a	8	Eo	4	a 6-1	nu4	1821.33550	8.2	0.117E-02	2196.44145	375.10677	1.0
*	O R	5	5 s	6	Ee	8	a 3 1	nu4	1821.39910	-18.7	0.160E-03	2026.67007	205.26910	1.0
*	S R	12	4 a	13	Ee	14	s 6-1	nu4	1821.52310	3.4	0.135E-03	3297.69910	1476.17634	1.0
	Q P	3	2 s	2	Eo	5	a 2 0	2nu2	1821.81380	1.0	0.155E-02	1926.23577	104.42207	1.0
	Q R	9	2 a	10	Ee	13	s 2 0	2nu2	1821.84153	-49.5	0.463E-02	2696.46292	874.61644	1.0
	R R	10	7 s	11	Ee	7	s 8 1	nu4	1822.16208	9.9	0.186E-01	2730.12612	907.96503	1.0
*	O R	7	3 s	8	A2e	7	a 1 1	nu4	1822.61554	-61.8	0.548E-02	2344.24365	521.62193	1.0
*	T R	11	1 s	12	Ee	15	s 4 0	2nu2	c1822.62184	0.0	0.481E-04	3117.77546	1295.19577	0.0
*	O R	6	3 s	7	A2e	7	a 1 1	nu4	1822.89810	-4.2	0.196E-02	2206.21694	383.31842	1.0
*	O R	6	4 s	7	Eo	11	a 2 1	nu4	1823.04940	9.8	0.613E-03	2180.63260	357.58418	1.0
	R R	11	9 a	12	A2o	2	a10 1	nu4	1823.35230	-34.6	0.280E-01	2831.86702	1008.51126	1.0
*	O Q	13	12 s	13	A2o	3	a10 1	nu4	c1823.43230	0.0	0.736E-04	3092.50946	1269.07084	0.0
	R R	9	3 s	10	A2e	7	s 4 1	nu4	1823.55698	7.2	0.108E-01	2679.73508	856.17882	1.0
*	N Q	12	11 s	12	Ee	8	s 8 0	2nu2	c1823.62511	0.0	0.337E-04	2921.05371	1097.43706	0.0
*	S R	11	3 s	12	A2e	7	a 5-1	nu4	1823.66740	2.0	0.506E-03	3090.60455	1266.93735	1.0
*	O Q	12	12 a	12	A2e	3	s10 1	nu4	1823.71013	7.0	0.108E-03	2836.76403	1013.05460	1.0
	R R	10	6 a	11	A2e	4	a 7 1	nu4	1823.85541	-22.1	0.198E-01	2779.50839	955.65077	1.0
	Q R	10	8 a	11	Ee	6	s 8 0	2nu2	1823.96041	-3.1	0.766E-02	2677.86748	853.90676	1.0
*	T R	12	2 s	13	Eo	16	s 5 0	2nu2	n1824.26324	0.0	0.209E-04	3342.20422	1517.94098	0.0
*	Q R	8	1 a	9	Eo	16	s 1-1	nu4	1824.49070	-29.3	0.989E-03	2533.24023	708.74660	1.0
	Q R	9	1 a	10	Eo	15	s 1 0	2nu2	1825.02198	-77.2	0.329E-02	2710.39934	885.36964	1.0
*	R R	9	2 s	10	Eo	14	a 3-1	nu4	c1825.07921	0.0	0.252E-04	2699.70024	874.61644	0.0
*	M Q	12	8 s	12	Eo	16	a 4-1	nu4	c1825.38414	0.0	0.151E-04	3130.50935	1305.12737	0.0
*	T R	13	3 s	14	A2e	8	s 6 0	2nu2	c1825.49114	0.0	0.162E-04	3577.92774	1752.43300	0.0
*	S R	13	5 a	14	Eo	13	s 7-1	nu4	c1825.56493	0.0	0.594E-04	3522.52226	1696.95789	0.0
*	* R	9	4 a	10	Ee	11	* * *	**	1825.67150	-2.9	0.128E-02	2657.12980	831.45801	1.0
*	N R	6	5 s	7	Ee	7	s 2 0	2nu2	1826.01230	29.7	0.582E-04	2150.37824	324.36891	1.0
*	O Q	13	12 a	13	A2e	4	s10 1	nu4	c1827.05151	0.0	0.944E-04	3097.01158	1269.95997	0.0
	R R	9	2 s	10	Eo	14	s 3 1	nu4	1827.07310	24.4	0.208E-02	2701.22095	874.15029	1.0
*	O R	7	2 s	8	Eo	15	a 0 1	nu4	1827.10160	-48.9	0.772E-03	2366.95139	539.84490	1.0
*	O Q	14	12 s	14	A2o	4	a10 1	nu4	c1827.10741	0.0	0.433E-04	3371.74052	1544.63569	0.0
	Q R	12	11 a	13	A2o	4	a12 1	nu4	1827.97570	79.3	0.121E-01	2926.26195	1098.29418	1.0
*	S R	12	4 s	13	Eo	14	a 6-1	nu4	c1828.01014	0.0	0.122E-03	3303.82567	1475.83298	0.0
*	* R	9	3 a	10	A2o	7	* * *	**	c1828.72268	0.0	0.606E-03	2685.38002	856.65843	0.0
	R R	11	9 s	12	A2e	3	s10 1	nu4	1828.95652	9.1	0.342E-01	2836.76403	1007.80842	1.0
	Q R	11	10 a	12	Ee	4	s10 0	2nu2	1829.00016	-47.3	0.823E-02	2767.79311	938.78822	0.0
	R R	10	6 s	11	A2o	5	s 7 1	nu4	1829.40797	10.1	0.209E-01	2784.51339	955.10643	1.0
*	S R	14	6 a	15	A2e	7	s 8-1	nu4	n1829.45112	0.0	0.479E-04	3759.06493	1929.61381	0.0
	R R	9	1 s	10	Ee	16	s 2 1	nu4	1829.59210	59.5	0.403E-03	2714.50173	884.91558	1.0
*	N Q	13	11 s	13	Ee	10	s 8 0	2nu2	c1829.71186	0.0	0.150E-04	3183.26853	1353.56634	0.0
	Q R	12	12 a	13	A2e	2	s12 0	2nu2	1829.78389	-6.9	0.181E-01	2842.83918	1013.05460	1.0
*	N R	7	4 s	8	Eo	11	s 1 0	2nu2	c1829.99764	0.0	0.912E-04	2326.02586	496.03508	0.0
*	* R	9	2 a	10	Ee	15	* * *	**	c1830.14962	0.0	0.178E-04	2704.76900	874.61644	0.0
*	O Q	14	12 a	14	A2e	5	s10 1	nu4	c1830.17164	0.0	0.503E-04	3375.55332	1545.38132	0.0
	P R	9	1 a	10	Eo	16	a 0 1	nu4	1830.48917	11.5	0.771E-02	2715.85766	885.36964	1.0
	R R	13	13 a	14	Eo	1	a14 1	nu4	1830.57300	415.0	0.106E-01	3007.78466	1177.25316	1.0
	R R	10	5 a	11	Eo	11	a 6 1	nu4	1830.60678	-10.6	0.613E-02	2825.87540	995.26756	1.0
*	O Q	15	12 s	15	A2o	5	a10 1	nu4	c1830.61953	0.0	0.193E-04	3669.04894	1838.45573	0.0
*	U R	12	1 a	13	Eo	17	s 5 1	nu4	n1831.21631	0.0	0.102E-04	3359.95098	1528.73467	0.0
*	Q R	8	1 s	9	Eo	15	a 1-1	nu4	1831.95460	-54.3	0.425E-03	2540.19851	708.23848	1.0
*	S R	13	5 s	14	Ee	15	a 7-1	nu4	n1832.03472	0.0	0.543E-04	3528.67653	1696.64181	0.0
	R R	11	8 a	12	Ee	7	a 9 1	nu4	1832.40290	-51.4	0.831E-02	2902.78534	1070.37730	1.0
*	M Q	10	9 a	10	A2o	5	s 5-1	nu4	c1832.59259	0.0	0.154E-04	2624.08137	791.48794	0.0
	Q R	10	7 a	11	Eo	7	s 7 0	2nu2	1832.90780	23.6	0.326E-02	2741.48040	908.57496	1.0
*	U R	11	0 s	12	A2o	8	a 4 1	nu4	1832.96450	-11.2	0.395E-04	3131.68806	1298.72244	1.0
*	O Q	15	12 a	15	A2e	6	s10 1	nu4	c1833.03065	0.0	0.205E-04	3672.10734	1839.07397	0.0
*	M Q	9	9 s	9	A2e	4	a 5-1	nu4	c1833.13661	0.0	0.110E-04	2425.72158	592.58650	0.0
	R R	12	11 s	13	Ee	3	s12 1	nu4	1833.24536	25.8	0.158E-01	2930.67984	1097.43706	1.0
*	S R	10	1 a	11	Eo	15	s 3-1	nu4	1833.37370	-7.2	0.365E-03	2914.40214	1081.02772	1.0
*	N R	8	3 s	9	A2o	3	s 0 0	2nu2	1833.57280	17.7	0.125E-02	2512.85889	679.28786	1.0
*	T Q	8	0 a	8	A2e	8	a 3 0	2nu2	c1834.49026	0.0	0.121E-04	2546.84319	712.35318	0.0
	P R	8	1 s	9	Ee	16	s 0 1	nu4	1834.57812	-25.7	0.107E-01	2542.81917	708.23848	1.0
	R R	13	13 s	14	Ee	2	s14 1	nu4	1834.64194	-6.6	0.149E-01	3010.78978	1176.14718	1.0
*	S R	10	1 s	11	Ee	15	a 3 1	nu4	c1835.45351	0.0	0.123E-04	2916.08164	1080.62686	0.0
	R R	10	5 s	11	Ee	11	s 6 1	nu4	1835.63610	13.8	0.580E-02	2830.40785	994.77313	1.0
	P R	8	2 s	9	Eo	16	s 1-1	nu4	1835.84277	-21.3	0.881E-02	2533.24023	697.39533	1.0
*	S R	14	6 s	15	A2o	8	a 8-1	nu4	n1835.95911	0.0	0.441E-04	3765.28051	1929.32140	0.0
*	M Q	11	9 a	11	A2o	6	s 5-1	nu4	c1836.22487	0.0	0.178E-04	2844.73618	1008.51126	0.0
*	P R	9	2 s	10	Eo	15	s 1 0	2nu2	c1836.24128	0.0	0.566E-04	2710.39934	874.15029	0.0
	R R	10	4 a	11	Ee	12	a 5 1	nu4	1836.51160	-0.3	0.376E-02	2864.04712	1027.53549	1.0
*	S R	9	0 s	10	A2o	8	a 2-1	nu4	1836.89091	3.6	0.155E-02	2725.39127	888.50072	1.0
*	S R	10	1 a	11	Eo	16	s 3 1	nu4	c1837.06036	0.0	0.275E-04	2918.08434	1081.02772	0.0
*	M Q	10	9 s	10	A2e	5	a 5-1	nu4	c1837.08460	0.0	0.232E-04	2627.76507	790.68053	0.0
*	N Q	12	12 s	12	A2o	3	s 9 0	2nu2	c1837.15053	0.0	0.417E-04	2849.15114	1012.00638	0.0
	P R	8	3 s	9	A2e	8	s 2-1	nu4	1837.45010	77.3	0.126E-01	2516.73023	679.28786	1.0
*	O Q	13	13 s	13	Ee	4	a11 1	nu4	c1837.59691	0.0	0.179E-04	3013.74785	1176.14718	0.0
	R R	11	8 s	12	Eo	7	s 9 1	nu4	1837.79119	-6.4	0.934E-02	2907.56331	1069.77148	1.0
*	S R	11	2 a	12	Ee	16	s 4-1	nu4	1838.17100	-21.3	0.210E-03	3123.13837	1284.96524	1.0
	R R	12	10 a	13	Ee	4	a11 1	nu4	1838.42050	-57.5	0.683E-02	3013.74785	1175.32160	1.0
	P R	8	4 s	9	Eo	11	s 3-1	nu4	1838.81230	14.3	0.484E-02	2492.68147	653.87060	1.0
*	M R	6	4 a	7	Ee	12	s 0 1	nu4	1839.21610	27.0	0.146E-03	2197.49789	358.28449	1.0
*	O R	6	5 a	7	Eo	10	s 3 1	nu4	1839.61117	-21.6	0.346E-03	2164.74052	325.12719	1.0
*	O R	8	3 a	9	A2o	7	s 1 1	nu4	1839.61160	46.1	0.896E-03	2519.44370	679.83671	1.0
*	Q R	9	2 a	10	Ee	16	s 2 1	nu4	1839.89115	58.6	0.149E-03	2714.50173	874.61644	1.0
*	T Q	6	0 a	6	A2e	6	a 3 0	2nu2	c1840.18422	0.0	0.114E-04	2257.07176	416.88774	0.0
	Q R	10	6 a	11	A2e	5	s 6 0	2nu2	1840.23070	13.3	0.251E-02	2795.88014	955.65077	1.0
*	M Q	12	9 a	12	A2o	7	s 5-1	nu4	c1840.26013	0.0	0.143E-04	3084.63133	1244.37178	0.0
	P R	8	5 s	9	Ee	10	s 4-1	nu4	1840.52780	-2.3	0.354E-02	2461.59358	621.06555	1.0
	R R	11	7 a	12	Eo	8	a 8 1	nu4	1840.61450	-22.5	0.496E-02	2965.18390	1124.56715	1.0
	Q R	11	9 a	12	A2o	3	s 9 0	2nu2	1840.64606	61.8	0.686E-02	2849.15114	1008.51126	1.0
*	S R	10	1 s	11	Ee	16	a 3-1	nu4	1840.77272	-135.1	0.282E-03	2921.41309	1080.62686	1.0
	R R	10	4 s	11	Eo	13	s 5 1	nu4	1840.85820	20.8	0.309E-02	2867.93460	1027.07848	1.0
*	O R	7	3 a	8	A2o	7	s 1 1	nu4	1841.00320	11.2	0.176E-02	2363.22501	522.22293	1.0
*	O Q	14	13 s	14	Ee	6	a11 1	nu4	c1841.22444	0.0	0.157E-04	3294.04406	1452.80963	0.0
*	O Q	13	13 a	13	Eo	6	s11 1	nu4	c1841.22991	0.0	0.245E-04	3018.48140	1177.25316	0.0
	R R	10	3 a	11	A2o	7	a 4 1	nu4	1841.56460	17.3	0.450E-02	2894.11270	1052.54983	1.0

*	M Q	11	9 s	11	A2e	6	a 5-1	nu4	c1841.66101	0.0	0.267E-04	2849.47064	1007.80842	0.0
*	O R	9	2 s	10	Eo	16	a 0 1	nu4	1841.70780	4.3	0.135E-03	2715.85766	874.15029	1.0
*	O R	7	4 a	8	Ee	12	s 2 1	nu4	1841.79593	-5.7	0.667E-03	2338.47264	496.67614	1.0
	R R	8	0 a	9	A2e	9	a 1 1	nu4	1841.98522	-78.5	0.104E-01	2554.34625	712.35318	1.0
	R R	13	12 a	14	A2e	2	a13 1	nu4	1841.98522	-62.4	0.112E-01	3111.95143	1269.95997	0.0
	P R	8	1 a	9	Eo	17	a 0 1	nu4	1842.05040	-74.7	0.510E-02	2550.80447	708.74660	1.0
	P R	8	6 s	9	A2o	4	s 5-1	nu4	1842.10397	-24.2	0.481E-02	2422.88602	580.77963	0.0
	Q P	2	1 s	1	Ee	3	a 1 0	2nu2	1842.10397	37.2	0.129E-02	1898.03897	55.93872	0.0
	P R	8	2 a	9	Ee	15	a 1-1	nu4	1842.27630	-52.0	0.504E-02	2540.19851	697.91701	1.0
*	O R	6	5 s	7	Ee	9	a 3 1	nu4	1842.72450	-12.4	0.290E-03	2167.09465	324.36891	1.0
*	S R	12	3 a	13	A2o	8	s 5-1	nu4	1842.74180	-17.6	0.205E-03	3343.50878	1500.76522	1.0
	P R	8	4 a	9	Ee	12	a 3-1	nu4	1842.85250	-14.1	0.327E-02	2497.30418	654.45027	1.0
*	N Q	13	12 s	13	A2o	4	s 9 0	2nu2	c1843.22578	0.0	0.326E-04	3112.31371	1269.07084	0.0
*	* R	10	1 s	11	Ee	17	* * *	**	n1843.28433	0.0	0.129E-03	2923.91119	1080.62686	0.0
	R R	14	14 a	15	Ee	2	a15 1	nu4	1843.53619	62.1	0.471E-02	3197.07244	1353.54246	0.0
	P R	8	5 a	9	Eo	10	a 4-1	nu4	1843.53760	-10.1	0.262E-02	2465.23154	621.69293	0.0
	P R	8	7 s	9	Ee	6	s 6-1	nu4	1843.53760	52.3	0.142E-02	2376.42640	532.89403	0.0
*	O R	7	4 s	8	Eo	12	a 2 1	nu4	1843.60010	37.7	0.551E-03	2339.63141	496.03508	1.0
	Q R	13	13 a	14	Eo	2	s13 0	2nu2	1843.65988	-6.6	0.430E-02	3020.91370	1177.25316	1.0
	R R	12	10 s	13	Eo	6	s11 1	nu4	1843.87490	15.6	0.820E-02	3018.48140	1174.60806	1.0
	Q R	12	11 a	13	Eo	5	s11 0	2nu2	1844.23470	-44.2	0.385E-02	2942.53330	1098.29418	1.0
	P R	8	6 a	9	A2e	4	a 5-1	nu4	1844.25210	12.7	0.375E-02	2425.72158	581.47075	1.0
	P R	8	3 a	9	A2o	8	a 2-1	nu4	1844.33440	-57.8	0.866E-02	2524.17689	679.83671	1.0
*	M R	5	5 s	6	Ee	10	a 1-1	nu4	c1844.60032	0.0	0.129E-04	2049.86683	205.26910	0.0
*	O Q	14	13 a	14	Eo	8	s11 1	nu4	c1844.68404	0.0	0.196E-04	3298.42397	1453.73603	0.0
	P R	8	8 s	9	Eo	5	s 7-1	nu4	1844.79710	-15.0	0.582E-03	2322.06269	477.26409	1.0
*	O R	8	2 a	9	Ee	16	s 0 1	nu4	1844.89980	-23.6	0.407E-03	2542.81917	697.91701	1.0
	P R	8	7 a	9	Eo	6	a 6-1	nu4	1844.96900	19.3	0.114E-02	2378.63605	533.66898	1.0
	R R	10	3 s	11	A2e	8	s 4 1	nu4	1845.05270	62.0	0.292E-02	2897.15290	1052.10640	1.0
*	N R	6	6 s	7	A2o	3	s 3 0	2nu2	1845.15512	-3.5	0.453E-04	2128.72982	283.57435	1.0
*	M R	6	4 s	7	Eo	13	a 0 1	nu4	1845.40460	-2.3	0.160E-03	2202.98901	357.58418	1.0
	R R	11	7 s	12	Ee	10	s 8 1	nu4	1845.52250	1.0	0.515E-02	2969.55808	1124.03568	1.0
	P R	8	8 a	9	Ee	5	a 7-1	nu4	1845.64852	-1.2	0.476E-03	2323.79730	478.14866	1.0
	R R	10	2 a	11	Ee	15	a 3 1	nu4	1845.72230	-15.3	0.122E-02	2916.08164	1070.35781	1.0
*	S R	11	2 s	12	Eo	16	a 4-1	nu4	1845.90570	26.8	0.187E-03	3130.50935	1284.60633	1.0
	Q R	10	5 a	11	Eo	12	s 5 0	2nu2	1845.91577	-82.3	0.381E-03	2841.19156	995.26756	0.0
*	T R	11	0 s	12	A2o	9	s 3 0	2nu2	c1846.42610	0.0	0.163E-03	3145.19056	1298.72244	0.0
*	M Q	12	9 s	12	A2e	7	a 5-1	nu4	c1846.83707	0.0	0.226E-04	3090.60455	1243.76714	0.0
*	S R	13	4 a	14	Ee	16	s 6-1	nu4	1847.18597	-39.8	0.447E-04	3575.53753	1728.34758	1.0
	R R	13	12 s	14	A2o	2	s13 1	nu4	1847.36467	55.1	0.146E-01	3116.43000	1269.07084	0.0
	R R	14	14 s	15	Eo	2	s15 1	nu4	1847.84193	48.3	0.668E-02	3200.20763	1352.37053	0.0
	R R	11	6 a	12	A2e	5	a 7 1	nu4	1847.93213	30.8	0.592E-02	3019.16437	1171.23532	1.0
	R R	12	9 a	13	A2o	3	a10 1	nu4	1848.13180	-58.8	0.784E-02	3092.50946	1244.37178	1.0
	R R	10	2 s	11	Eo	16	s 3 1	nu4	1848.13183	-62.1	0.526E-03	2918.08434	1069.94630	0.0
	Q Q	15	12 s	15	A2o	6	a12 0	2nu2	n1848.64862	0.0	0.108E-04	3687.10435	1838.45573	0.0
*	N Q	14	12 s	14	A2o	5	s 9 0	2nu2	n1848.95762	0.0	0.215E-04	3393.59331	1544.63569	0.0
	R R	10	1 a	11	Eo	17	a 2 1	nu4	1849.04800	0.8	0.478E-03	2930.07564	1081.02772	1.0
*	T R	12	1 s	13	Ee	17	s 4 0	2nu2	n1849.24678	0.0	0.188E-04	3377.68015	1528.43337	0.0
*	Q R	9	1 a	10	Eo	18	s 1-1	nu4	1849.74900	-8.9	0.495E-03	2735.11953	885.36964	1.0
*	N R	7	5 s	8	Ee	9	s 2 0	2nu2	c1849.75806	0.0	0.896E-04	2312.76829	463.01304	0.0
	Q R	10	4 a	11	Ee	13	s 4 0	2nu2	c1849.98109	0.0	0.536E-04	2877.52928	1027.53549	0.0
*	S R	12	3 s	13	A2e	8	a 5-1	nu4	n1850.13073	0.0	0.158E-03	3350.53478	1500.40405	0.0
	Q R	11	8 a	12	Ee	8	s 8 0	2nu2	1850.68400	75.9	0.134E-02	2921.05371	1070.37730	1.0
*	* R	10	1 s	11	Ee	18	* * *	**	n1850.80408	0.0	0.655E-04	2931.43094	1080.62686	0.0
*	S R	14	5 a	15	Eo	15	s 7-1	nu4	n1851.45493	0.0	0.178E-04	3819.19740	1967.74247	0.0
*	M Q	13	9 s	13	A2e	8	a 5-1	nu4	n1852.19230	0.0	0.232E-04	3350.53478	1498.34248	0.0
	R R	11	6 s	12	A2o	6	s 7 1	nu4	1852.21150	4.3	0.568E-02	3022.97191	1170.76084	1.0
	Q R	10	0 a	11	A2e	9	s 0 0	2nu2	1852.33670	-2.5	0.710E-03	2936.91815	1084.58120	1.0
	R R	13	11 a	14	Eo	5	a12 1	nu4	1853.15290	-101.0	0.307E-02	3207.45710	1354.29410	1.0
	R R	12	9 s	13	A2e	4	s10 1	nu4	1853.24438	-0.6	0.870E-02	3097.01158	1243.76714	1.0
*	O R	8	2 s	9	Eo	17	a 0 1	nu4	1853.40130	-78.4	0.452E-03	2550.80447	697.39533	1.0
*	* R	10	2 a	11	Ee	17	* * *	**	n1853.55338	0.0	0.123E-03	2923.91119	1070.35781	0.0
	Q R	10	1 a	11	Eo	19	s 1 0	2nu2	c1853.69663	0.0	0.519E-03	2934.69514	1081.02772	0.0
*	+ R	12	3 s	13	A2e	9	a 9 0	2nu2	n1853.72851	0.0	0.213E-04	3354.13256	1500.40405	0.0
	R R	11	5 a	12	Eo	13	a 6 1	nu4	1854.33920	49.8	0.175E-02	3064.84628	1210.51206	1.0
*	N R	8	4 s	9	Eo	13	s 1 0	2nu2	1854.57565	9.5	0.104E-03	2508.44530	653.87060	1.0
*	S R	10	0 a	11	A2e	10	s 2-1	nu4	1855.10662	-43.2	0.211E-02	2939.69214	1084.58120	1.0
*	S R	13	4 s	14	Eo	16	a 6-1	nu4	n1855.15660	0.0	0.391E-04	3583.21189	1728.05529	0.0
*	U R	12	0 a	13	A2e	10	s 4 1	nu4	n1855.64698	0.0	0.404E-04	3387.87345	1532.22647	0.0
	R R	14	13 a	15	Eo	3	a14 1	nu4	1855.70228	79.2	0.241E-02	3309.43039	1453.73603	1.0
	Q Q	12	6 s	12	A2o	12	a 6 0	2nu2	c1855.78317	0.0	0.185E-04	3260.93678	1405.15377	0.0
	Q Q	13	9 s	13	A2e	9	a 9 0	2nu2	n1855.79008	0.0	0.115E-04	3354.13256	1498.34248	0.0
*	N Q	13	13 s	13	Ee	5	s10 0	2nu2	c1856.00938	0.0	0.121E-04	3032.15793	1176.14718	0.0
	Q Q	12	7 s	12	Ee	23	a 7 0	2nu2	n1856.74538	0.0	0.147E-04	3215.61660	1358.87122	0.0
	Q R	12	10 a	13	Ee	5	s10 0	2nu2	1856.83496	-13.7	0.150E-02	3032.15793	1175.32160	1.0
*	O R	6	6 a	7	A2e	4	s 4 1	nu4	1856.83520	-2.2	0.217E-03	2141.24555	284.41013	0.0
	R R	12	8 a	13	Ee	9	a 9 1	nu4	1856.92688	-5.4	0.226E-02	3162.57624	1305.64882	1.0
	Q R	14	14 a	15	Ee	3	s14 0	2nu2	1857.15415	59.7	0.197E-02	3210.69064	1353.54246	1.0
	Q Q	13	10 s	13	Eo	13	a10 0	2nu2	c1857.48746	0.0	0.195E-04	3287.31994	1429.91057	0.0
*	S R	11	1 s	12	Ee	17	a 3 1	nu4	c1857.77668	0.0	0.145E-04	3152.97220	1295.19577	0.0
	R R	11	5 s	12	Ee	13	s 6 1	nu4	1857.90010	3.6	0.154E-02	3067.98073	1210.08099	1.0
	Q Q	12	8 s	12	Eo	19	a 8 0	2nu2	n1858.14273	0.0	0.231E-04	3163.27010	1305.12737	0.0
*	S R	11	1 a	12	Eo	18	s 3-1	nu4	1858.31868	-32.5	0.163E-03	3153.86733	1295.54540	1.0
*	Q R	9	1 s	10	Ee	17	a 1-1	nu4	c1858.54023	0.0	0.586E-04	2743.45226	884.91558	0.0
	R R	13	11 s	14	Ee	5	s12 1	nu4	1858.60597	37.9	0.366E-02	3212.16852	1353.56634	1.0
*	O Q	14	14 a	14	Ee	5	s12 1	nu4	c1858.62939	0.0	0.104E-04	3212.16852	1353.54246	0.0
	Q Q	11	5 s	11	Ee	22	a 5 0	2nu2	c1858.66264	0.0	0.162E-04	3068.74479	1210.08099	0.0
	Q Q	14	12 s	14	A2o	6	a12 0	2nu2	n1858.87318	0.0	0.185E-04	3403.50887	1544.63569	0.0
	Q R	13	12 a	14	A2e	3	s12 0	2nu2	1859.03261	-29.3	0.350E-02	3128.99551	1269.95997	1.0
*	O R	9	3 s	10	A2e	8	a 1 1	nu4	1859.12550	18.5	0.134E-02	2715.30247	856.17882	1.0
	Q R	11	7 a	12	Eo	9	s 7 0	2nu2	1859.17966	155.0	0.466E-03	2983.73131	1124.56715	1.0
*	S R	14	5 s	15	Ee	17	a 7-1	nu4	n1859.43863	0.0	0.158E-04	3826.91528	1967.47665	0.0
	Q Q	11	6 s	11	A2o	11	a 6 0	2nu2	1859.57010	0.8	0.536E-04	3030.33086	1170.76084	1.0
	Q Q	15	14 s	15	Eo	8	a14 0	2nu2	n1859.70568	0.0	0.157E-04	3508.30553	1648.59985	0.0
	R R	9	0 s	10	A2o	9	s 1 1	nu4	1859.71600	-12.1	0.718E-02	2748.21793	888.50072	1.0
	R R	11	4 a	12	Ee	14	a 5 1	nu4	1859.83630	52.8	0.100E-02	3102.33607	1242.50505	1.0
	P R	9	1 s	10	Ee	18	s 0 1	nu4	1860.07260	-80.6	0.366E-02	2744.99624	884.91558	1.0
	Q Q	14	13 s	14	Ee	7	a13 0	2nu2	n1860.08026	0.0	0.266E-04	3312.88989	1452.80963	0.0
	Q Q	12	9 s	12	A2e	8	a 9 0	2nu2	1860.13267	-2.5	0.710E-04	3103.90006	1243.76714	1.0
	Q Q	13	11 s	13	Ee	11	a11 0	2nu2	n1860.48704	0.0	0.296E-04	3214.05338	1353.56634	0.0
*	O R	7	5 a	8	Eo	10	s 3 1	nu4	1860.61990	-37.4	0.370E-03	2324.33065	463.70701	1.0
	Q Q	11	7 s	11	Ee	21	a 7 0	2nu2	c1860.86245	0.0	0.430E-04	2984.89551	1124.03568	0.0
	Q Q	10	3 s	10	A2e	10	a 3 0	2nu2	c1860.92702	0.0	0.254E-04	2913.03160	1052.10640	0.0
	P R	9	2 s	10	Eo	18	s 1-1	nu4	1860.96850	-7.4	0.302E-02	2735.11953	874.15029	1.0
*	* R	10	2 a	11	Ee	18	* * *	**	n1861.07313	0.0	0.108E-03	2931.43094	1070.35781	0.0
*	O R	6	6 s	7	A2o	4	a 4 1	nu4	1861.07640	-0.5	0.171E-03	2144.65080	283.57435	1.0
	R R	14	13 s	15	Ee	4	s14 1	nu4	1861.28111	107.2	0.315E-02	3314.08002	1452.80963	1.0
	R R	12	8 s	13	Eo	9	s 9 1	nu4	1861.45790	-3.1	0.234E-02	3166.58558	1305.12737	1.0

	Q Q	10	4 s	10	Eo	20	a 4 0	2nu2	c1861.48371	0.0	0.246E-04	2888.56220	1027.07848	0.0
	Q P	1	0 s	0	A2o	1	a 0 0	2nu2	1862.28760	-10.2	0.144E-02	1882.17851	19.88989	1.0
	Q Q	10	5 s	10	Ee	20	a 5 0	2nu2	c1862.31234	0.0	0.431E-04	2857.08587	994.77313	0.0
*	M R	7	5 a	8	Eo	11	s 1 0	2nu2	c1862.32571	0.0	0.194E-04	2326.02586	463.70701	0.0
*	O R	8	4 a	9	Ee	14	s 2 1	nu4	1862.42720	27.1	0.503E-03	2516.87476	654.45027	1.0
	R R	11	4 s	12	Eo	15	s 5 1	nu4	1862.60920	0.2	0.792E-03	3104.71571	1242.10653	1.0
	Q Q	11	8 s	11	Eo	18	a 8 0	2nu2	1862.66350	26.3	0.680E-04	2932.43235	1069.77148	1.0
	Q Q	12	10 s	12	Eo	11	a10 0	2nu2	1862.77582	-67.1	0.622E-04	3037.39059	1174.60806	1.0
	P R	9	4 s	10	Eo	13	s 3-1	nu4	1862.92900	19.0	0.184E-02	2693.86729	830.94019	1.0
	Q Q	10	6 s	10	A2o	10	a 6 0	2nu2	1863.48510	-2.4	0.143E-03	2818.59177	955.10643	1.0
	R R	13	10 a	14	Ee	6	a11 1	nu4	1863.51724	-99.1	0.171E-02	3294.04406	1430.51691	1.0
*	S R	12	2 a	13	Ee	18	s 4-1	nu4	c1863.54593	0.0	0.776E-04	3381.80862	1518.25026	0.0
*	M R	6	5 a	7	Eo	12	s 1-1	nu4	c1863.57110	0.0	0.283E-04	2188.69945	325.12719	0.0
*	M R	7	4 a	8	Ee	14	s 0 1	nu4	1863.57420	-2.5	0.159E-03	2360.25059	496.67614	1.0
	Q Q	9	2 s	9	Eo	19	a 2 0	2nu2	1863.77820	0.4	0.130E-04	2737.92845	874.15029	1.0
*	O R	7	5 s	8	Ee	11	a 3 1	nu4	1863.87380	12.0	0.293E-03	2326.88564	463.01304	1.0
*	* R	8	4 s	9	Eo	14	* * *	**	1864.13190	57.2	0.388E-03	2517.99678	653.87060	1.0
	Q Q	9	3 s	9	A2e	10	a 3 0	2nu2	1864.24330	-15.6	0.626E-04	2720.42368	856.17882	1.0
	P R	9	5 a	10	Ee	12	s 4-1	nu4	1864.37500	4.6	0.150E-02	2662.74905	798.37451	1.0
	R R	11	3 a	12	A2o	8	a 4 1	nu4	1864.39890	-1.9	0.104E-02	3131.68806	1267.28897	1.0
	Q R	13	12 a	13	A2o	5	a12 0	2nu2	n1864.66524	0.0	0.954E-04	3133.73608	1269.07084	0.0
	R R	12	7 a	13	Eo	10	a 8 1	nu4	1864.74759	78.6	0.130E-02	3224.06858	1359.32885	1.0
*	P R	10	2 s	11	Eo	19	s 1 0	2nu2	c1864.77805	0.0	0.944E-04	2934.69514	1069.94630	0.0
	Q Q	9	4 s	9	Eo	18	a 4 0	2nu2	1864.96911	-13.3	0.607E-04	2695.91063	830.94019	1.0
	Q Q	10	7 s	10	Ee	19	a 7 0	2nu2	1865.10900	2.2	0.115E-03	2773.07381	907.96503	1.0
	Q Q	11	9 s	11	A2e	7	a 9 0	2nu2	1865.14080	50.1	0.216E-03	2872.94421	1007.80842	1.0
*	* R	9	3 s	10	A2e	9	* * *	**	1865.52120	-125.2	0.420E-02	2721.71254	856.17882	1.0
	P R	9	6 s	10	A2o	5	s 5-1	nu4	1865.69530	-8.1	0.231E-02	2624.08137	758.38526	1.0
*	* R	11	1 s	12	Ee	18	* * *	**	n1865.78740	0.0	0.639E-04	3160.98317	1295.19577	0.0
	Q Q	9	5 a	9	Ee	18	a 5 0	2nu2	1866.00404	-9.4	0.106E-03	2664.37949	798.37451	1.0
	R R	11	6 a	12	A2e	6	s 6 1	nu4	1866.09321	42.8	0.247E-03	3037.32425	1171.23532	1.0
	R R	11	3 s	12	A2e	9	s 4 1	nu4	1866.34095	-57.6	0.734E-03	3133.28406	1266.93735	1.0
*	T R	13	11 a	14	Eo	6	a14 0	2nu2	n1866.48673	0.0	0.453E-04	3220.78083	1354.29410	0.0
	Q Q	12	11 s	12	Ee	9	a11 0	2nu2	1866.57858	21.7	0.963E-04	2964.01347	1097.43706	1.0
	P R	9	7 s	10	Ee	8	s 6-1	nu4	1866.90470	-16.6	0.827E-03	2577.76266	710.85630	1.0
	Q Q	8	2 s	8	Eo	17	a 2 0	2nu2	1866.97810	0.6	0.299E-04	2564.37337	697.39533	1.0
	Q Q	15	15 s	15	A2e	2	a15 0	2nu2	n1867.13964	0.0	0.407E-04	3407.75978	1540.62014	0.0
	Q Q	10	8 s	10	Eo	17	a 8 0	2nu2	1867.32160	8.6	0.183E-03	2720.53194	853.21120	1.0
	Q Q	9	6 s	9	A2o	9	a 6 0	2nu2	1867.43958	-11.7	0.354E-03	2625.82601	758.38526	1.0
	Q Q	8	3 s	8	A2e	8	a 3 0	2nu2	1867.55554	2.1	0.143E-03	2546.84319	679.28786	1.0
	R R	14	12 a	15	A2e	3	a13 1	nu4	n1867.59035	0.0	0.257E-02	3412.97167	1545.38132	0.0
	Q R	12	9 a	13	A2o	4	s 9 0	2nu2	c1867.92484	0.0	0.109E-02	3112.31371	1244.37178	0.0
	P R	9	8 s	10	Eo	6	s 7-1	nu4	1867.99540	-24.5	0.513E-03	2523.64417	655.64632	1.0
	R R	11	2 a	12	Ee	17	a 3 1	nu4	1868.00183	-51.3	0.213E-03	3152.97220	1284.96524	0.0
	P R	9	4 a	10	Ee	14	a 3-1	nu4	1868.23870	-35.3	0.104E-02	2699.70024	831.45801	1.0
	Q Q	14	14 s	14	Eo	6	a14 0	2nu2	n1868.41030	0.0	0.462E-04	3220.78083	1352.37053	0.0
	Q Q	8	4 s	8	Eo	16	a 4 0	2nu2	1868.42170	-8.9	0.140E-03	2522.29319	653.87060	1.0
*	S R	13	3 a	14	A2o	9	s 5-1	nu4	n1868.42983	0.0	0.675E-04	3621.07803	1752.64820	0.0
	P R	9	5 a	10	Eo	12	a 4-1	nu4	1868.50950	56.8	0.992E-03	2667.43865	798.93483	0.0
	Q Q	11	10 s	11	Eo	10	a10 0	2nu2	1868.50950	108.5	0.170E-03	2806.45688	937.95823	0.0
	R R	13	10 s	14	Eo	8	s11 1	nu4	1868.50950	-39.0	0.188E-02	3298.42397	1429.91057	1.0
*	N R	7	6 s	8	A2o	4	s 3 0	2nu2	1868.53360	30.0	0.110E-03	2290.98871	422.45811	0.0
	R R	12	7 s	13	Ee	12	s 8 1	nu4	1868.59530	-10.5	0.127E-02	3227.46757	1358.87122	1.0
	P R	9	3 a	10	A2o	8	a 2-1	nu4	1868.73255	-2.9	0.270E-02	2725.39127	856.65843	1.0
	P R	9	6 a	10	A2e	5	a 5-1	nu4	1868.76260	-1.4	0.166E-02	2627.76507	759.00233	1.0
*	M R	6	5 s	7	Ee	11	a 1-1	nu4	c1868.79056	0.0	0.376E-04	2193.15945	324.36891	0.0
	P R	9	2 a	10	Ee	17	a 1-1	nu4	1868.84060	47.8	0.161E-02	2743.45226	874.61644	1.0
*	* R	9	1 a	10	Eo	19	* * *	**	1868.95380	-35.7	0.139E-02	2754.32701	885.36964	1.0
	P R	9	9 s	10	A2e	2	s 8-1	nu4	c1868.96673	0.0	0.443E-03	2461.55485	592.58650	0.0
*	R R	11	1 s	12	Ee	19	s 2 0	2nu2	n1868.97754	0.0	0.973E-04	3164.17331	1295.19577	0.0
	P R	9	7 a	10	Eo	7	a 6-1	nu4	1869.08787	6.9	0.628E-03	2580.63514	711.54796	1.0
	R R	11	2 s	12	Eo	17	s 3 1	nu4	c1869.11292	0.0	0.112E-03	3153.72715	1284.60633	0.0
	Q Q	9	7 s	9	Ee	17	a 7 0	2nu2	1869.39130	-10.9	0.286E-03	2580.24869	710.85630	1.0
	P R	9	8 a	10	Ee	7	a 7-1	nu4	1869.45120	21.2	0.403E-03	2525.88453	656.43545	1.0
	Q Q	8	5 s	8	Ee	16	a 5 0	2nu2	1869.65430	-11.4	0.245E-03	2490.72099	621.06555	1.0
	Q Q	7	1 s	7	Ee	15	a 1 0	2nu2	c1869.69171	0.0	0.154E-04	2420.44892	550.75859	0.0
	P R	9	9 a	10	A2o	3	a 8-1	nu4	1869.81390	11.9	0.355E-03	2463.31577	593.50306	1.0
	Q Q	7	2 s	7	Eo	15	a 2 0	2nu2	1870.07530	6.0	0.641E-04	2409.91960	539.84490	1.0
	Q Q	10	9 s	10	A2e	6	a 9 0	2nu2	1870.26752	-280.0	0.584E-03	2660.97605	790.68053	1.0
	Q Q	13	13 s	13	Ee	7	a13 0	2nu2	n1870.29916	0.0	0.816E-03	3046.44634	1176.14718	0.0
*	O R	9	2 a	10	Ee	18	s 0 1	nu4	1870.37170	-81.0	0.114E-03	2744.99624	874.61644	1.0
	Q Q	7	3 s	7	A2e	8	a 3 0	2nu2	1870.74610	0.1	0.308E-03	2392.36802	521.62193	1.0
	R R	11	1 a	12	Eo	20	a 2 1	nu4	n1870.82842	0.0	0.242E-04	3166.37382	1295.54540	0.0
*	M R	7	4 s	8	Eo	15	a 0 1	nu4	1870.91150	-48.1	0.160E-03	2366.95139	496.03508	1.0
	Q Q	8	6 s	8	A2o	8	a 6 0	2nu2	1871.34302	-13.1	0.816E-03	2452.12396	580.77963	1.0
	Q R	11	5 a	12	Eo	14	s 5 0	2nu2	c1871.47675	0.0	0.128E-04	3081.95488	1210.51206	0.0
	R R	12	6 a	13	A2e	6	a 7 1	nu4	1871.58610	136.6	0.148E-02	3277.13487	1405.56243	1.0
	Q Q	12	12 s	12	A2o	4	a12 0	2nu2	1871.63161	12.9	0.318E-03	2883.63670	1012.00638	1.0
	Q Q	7	4 s	7	Eo	14	a 4 0	2nu2	1871.75680	-4.5	0.300E-03	2367.79233	496.03508	1.0
	Q Q	9	8 s	9	Eo	15	a 8 0	2nu2	1872.00540	-11.7	0.457E-03	2527.65289	655.64632	1.0
	Q Q	6	1 s	6	Ee	13	a 1 0	2nu2	1872.55410	9.9	0.311E-04	2285.17741	412.62430	1.0
*	S R	12	2 s	13	Eo	18	a 4-1	nu4	1872.75211	79.3	0.674E-04	3390.68516	1517.94098	1.0
	R R	13	9 a	14	A2o	4	a10 1	nu4	1872.88533	14.0	0.190E-02	3371.74052	1498.85659	1.0
	Q Q	11	11 s	11	Eo	8	a11 0	2nu2	1872.96398	-10.6	0.284E-03	2732.96578	860.00074	1.0
	Q Q	6	2 s	6	Eo	13	a 2 0	2nu2	1872.99080	3.1	0.129E-03	2274.63832	401.64783	1.0
*	S R	14	4 s	15	Ee	18	s 6-1	nu4	n1873.03368	0.0	0.134E-04	3871.84041	1998.80673	0.0
	Q R	13	11 a	14	Eo	7	s11 0	2nu2	n1873.07927	0.0	0.603E-03	3227.37337	1354.29410	0.0
	R R	14	12 s	15	A2o	3	s13 1	nu4	1873.14352	77.1	0.306E-02	3417.77150	1544.63569	0.0
	Q Q	7	5 s	7	Eo	14	a 5 0	2nu2	1873.17540	-13.1	0.527E-03	2336.18975	463.01304	1.0
	Q R	14	13 a	15	Eo	4	s13 0	2nu2	1873.39261	9.9	0.769E-03	3327.12765	1453.73603	1.0
	Q Q	8	7 s	8	Ee	15	a 7 0	2nu2	1873.60901	-14.4	0.661E-03	2406.50448	532.89403	1.0
	Q Q	6	3 s	6	A2e	6	a 3 0	2nu2	1873.75340	0.6	0.621E-03	2257.07176	383.31842	1.0
*	N R	8	5 s	9	Ee	11	s 2 0	2nu2	1873.90794	0.7	0.108E-03	2494.97342	621.06555	1.0
	Q Q	10	10 s	10	Eo	8	a10 0	2nu2	1874.24974	-13.4	0.470E-03	2594.43018	720.17910	1.0
	R R	12	6 s	13	A2o	7	s 7 1	nu4	1874.71960	-26.9	0.137E-02	3279.87606	1405.15377	1.0
	Q Q	6	4 s	6	Eo	12	a 4 0	2nu2	1874.89150	-3.1	0.606E-03	2232.47599	357.58418	1.0
*	O R	8	3 s	9	A2e	9	a 1 1	nu4	1875.05050	-78.9	0.981E-03	2554.34625	679.28786	1.0
	Q Q	7	6 s	7	A2o	7	a 6 0	2nu2	1875.10310	-0.4	0.176E-02	2297.56125	422.45811	1.0
	Q Q	5	1 s	5	Ee	11	a 1 0	2nu2	1875.16560	-0.4	0.594E-04	2169.13390	293.96826	0.0
*	Q R	10	1 a	11	Eo	20	s 1-1	nu4	1875.39081	52.0	0.222E-03	2956.41333	1081.02772	0.0
	Q Q	9	9 s	9	A2e	5	a 9 0	2nu2	1875.46667	-11.2	0.146E-02	2468.05429	592.58650	1.0
	Q Q	5	2 s	5	Eo	11	a 2 0	2nu2	1875.65020	-2.1	0.247E-03	2158.58755	282.93714	1.0
	Q Q	6	5 s	6	Ee	12	a 5 0	2nu2	1876.48206	-3.1	0.107E-02	2200.85128	324.36891	1.0
	Q Q	5	3 s	5	A2e	6	a 3 0	2nu2	1876.49365	8.1	0.119E-02	2141.00946	264.51662	1.0
	Q Q	8	8 s	8	Eo	14	a 8 0	2nu2	1876.60820	0.0	0.106E-02	2353.87229	477.26409	1.0
*	U R	13	0 s	14	A2o	10	a 4 1	nu4	c1876.80240	0.0	0.130E-04	3660.39863	1783.59992	0.0
	R R	13	9 s	14	A2o	5	s10 1	nu4	1877.21056	-2.8	0.197E-02	3375.55332	1498.34248	1.0
	R R	12	5 a	13	Eo	15	a 6 1	nu4	1877.45544	141.3	0.413E-03	3321.91790	1444.47659	0.0

	Q Q	4	1 s	4	Ee	9	a 1 0	2nu2	1877.45770	-15.1	0.108E-03	2072.36552	194.90631	0.0
	Q R	12	8 a	13	Ee	10	s 8 0	2nu2	c1877.62938	0.0	0.177E-03	3183.26853	1305.64882	0.0
	Q Q	7	7 s	7	Ee	13	a 7 0	2nu2	1877.66500	15.5	0.143E-02	2251.91245	374.24900	1.0
	Q Q	5	4 s	5	Eo	10	a 4 0	2nu2	1877.74707	1.6	0.116E-02	2116.39951	238.65260	1.0
	Q R	11	3 a	12	A2o	9	s 3 0	2nu2	1877.85972	-418.7	0.993E-04	3145.19056	1267.28897	1.0
	Q Q	4	2 s	4	Eo	9	a 2 0	2nu2	1877.98460	-1.9	0.451E-03	2061.81387	183.82908	1.0
*	S R	13	3 s	14	A2e	10	a 5-1	nu4	c1878.25199	0.0	0.545E-04	3630.69483	1752.43300	0.0
*	O R	7	6 a	8	A2e	5	s 4 1	nu4	1878.36470	-11.9	0.376E-03	2301.58870	423.22281	1.0
	R R	14	11 a	15	Eo	7	a12 1	nu4	n1878.58284	0.0	0.653E-03	3507.35017	1628.76733	0.0
	Q Q	6	6 s	6	A2o	6	a 6 0	2nu2	1878.62950	33.7	0.357E-02	2162.20048	283.57435	0.0
	Q Q	4	3 s	4	A2e	4	a 3 0	2nu2	1878.89730	7.6	0.217E-02	2044.22762	165.33108	1.0
	Q R	11	2 a	12	Ee	19	s 2 0	2nu2	n1879.20807	0.0	0.942E-04	3164.17331	1284.96524	0.0
	Q Q	3	1 s	3	Ee	7	a 1 0	2nu2	1879.37190	-8.6	0.193E-03	1994.90937	115.53661	1.0
*	N R	9	4 s	10	Eo	15	s 1 0	2nu2	c1879.45138	0.0	0.133E-03	2710.39934	830.94019	0.0
	Q Q	5	5 s	5	Ee	10	a 5 0	2nu2	1879.49270	28.2	0.205E-02	2084.75898	205.26910	1.0
*	T R	14	11 a	15	Eo	8	a14 0	2nu2	n1879.53820	0.0	0.397E-04	3508.30553	1628.76733	0.0
	Q R	11	1 a	12	Eo	21	s 1 0	2nu2	n1879.80873	0.0	0.211E-03	3175.35413	1295.54540	0.0
	R R	12	5 s	13	Ee	15	s 6 1	nu4	1879.87810	-56.6	0.360E-03	3323.98900	1444.10524	0.0
	Q Q	3	2 s	3	Eo	7	a 2 0	2nu2	1879.93170	-1.9	0.804E-03	1984.35396	104.42207	1.0
*	* R	9	2 s	10	Eo	19	* * *	**	1880.17280	-39.2	0.232E-03	2754.32701	874.15029	1.0
	Q Q	4	4 s	4	Eo	8	a 4 0	2nu2	1880.25160	22.5	0.212E-02	2019.60736	139.35801	1.0
	Q Q	2	1 s	2	Ee	5	a 1 0	2nu2	1880.85521	2.1	0.350E-03	1936.79372	55.93872	1.0
	Q Q	3	3 s	3	A2e	4	a 3 0	2nu2	1880.90140	10.8	0.387E-02	1966.76191	85.86159	1.0
	R R	13	8 a	14	Ee	11	a 9 1	nu4	1881.19319	160.0	0.527E-03	3440.68864	1559.51145	0.0
	Q Q	2	2 s	2	Eo	5	a 2 0	2nu2	1881.44000	2.1	0.146E-02	1926.23577	44.79598	1.0
*	O R	10	3 a	11	A2o	9	s 1 1	nu4	c1881.46541	0.0	0.174E-03	2933.97417	1052.54983	0.0
*	O R	8	5 a	9	Eo	12	s 3 1	nu4	1881.57000	-5.3	0.307E-03	2503.26346	621.69293	1.0
	Q Q	1	1 s	1	Ee	3	a 1 0	2nu2	1881.86550	-4.8	0.739E-03	1898.03897	16.17299	1.0
	R R	12	4 a	13	Ee	16	a 5 1	nu4	1882.36740	72.0	0.218E-03	3358.53654	1476.17634	1.0
*	T R	13	10 a	14	Ee	7	a13 0	2nu2	n1882.37298	0.0	0.117E-03	3312.88989	1430.51691	0.0
*	* R	12	1 a	13	Eo	20	* * *	**	n1882.75370	0.0	0.516E-04	3411.48837	1528.73467	0.0
*	S R	14	4 s	15	Eo	18	a 6-1	nu4	n1882.75412	0.0	0.113E-04	3881.31502	1998.56090	0.0
*	O R	7	6 s	8	A2o	5	a 4 1	nu4	1882.98820	13.5	0.264E-03	2305.44496	422.45811	1.0
*	O R	9	4 a	10	Ee	16	s 2 1	nu4	1883.04920	54.8	0.327E-03	2714.50173	831.45801	1.0
*	* R	11	2 a	12	Ee	20	* * *	**	n1883.48438	0.0	0.593E-04	3168.44962	1284.96524	0.0
	R R	14	11 s	15	Ee	7	s12 1	nu4	1883.59723	44.3	0.759E-03	3511.74926	1628.15646	1.0
	R R	12	4 s	13	Eo	17	s 5 1	nu4	1884.10930	-87.0	0.178E-03	3359.95098	1475.83298	0.0
	R R	13	8 s	14	Eo	11	s 9 1	nu4	c1884.78719	0.0	0.520E-03	3443.86017	1559.06789	0.0
*	N R	10	3 s	11	A2e	9	s 0 0	2nu2	1884.81090	-8.5	0.636E-03	2936.91815	1052.10640	1.0
*	M R	9	4 s	10	Eo	16	a 0 1	nu4	1884.91790	4.3	0.187E-03	2715.85766	830.94019	1.0
*	* R	8	5 s	9	Ee	13	* * *	**	1884.97290	24.7	0.202E-03	2506.03598	621.06555	1.0
*	* R	10	1 s	11	Ee	19	* * *	**	n1885.31946	0.0	0.116E-03	2965.94632	1080.62686	0.0
	Q R	12	7 a	13	Eo	12	s 7 0	2nu2	c1885.81412	0.0	0.448E-04	3245.15807	1359.32885	0.0
*	* R	10	1 s	11	Ee	20	* * *	**	n1886.15863	0.0	0.916E-03	2966.78549	1080.62686	0.0
	R R	12	3 a	13	A2o	9	a 4 1	nu4	1886.33732	-10.4	0.204E-03	3387.10358	1500.76522	1.0
*	N R	7	7 s	8	Ee	6	s 4 0	2nu2	c1886.47160	0.0	0.195E-04	2260.72040	374.24900	0.0
	P R	10	2 s	11	Eo	20	s 1-1	nu4	1886.47240	53.7	0.827E-03	2956.41333	1069.94630	1.0
*	* R	13	10 a	14	Ee	9	* * *	**	n1887.29510	0.0	0.104E-03	3317.81201	1430.51691	0.0
*	M R	7	5 a	8	Eo	13	s 1-1	nu4	c1887.31566	0.0	0.461E-04	2351.02478	463.70701	0.0
	P R	10	4 s	11	Eo	15	s 3-1	nu4	1887.32340	-2.6	0.520E-03	2914.40214	1027.07848	1.0
	R R	12	3 s	13	A2e	10	s 4 1	nu4	1887.47780	84.0	0.142E-03	3387.87345	1500.40405	0.0
	P R	10	3 s	11	A2e	10	s 2-1	nu4	1887.58158	-41.6	0.906E-03	2939.69214	1052.10640	1.0
	Q R	14	12 a	15	A2e	4	s12 0	2nu2	1888.18444	62.2	0.532E-03	3433.55954	1545.38132	0.0
*	* R	12	1 s	13	Ee	20	* * *	**	n1888.29726	0.0	0.123E-04	3416.73063	1528.43337	0.0
*	M R	8	4 a	9	Ee	16	s 0 1	nu4	1888.36660	-23.0	0.131E-03	2542.81917	654.45027	1.0
	R R	13	7 a	14	Eo	12	a 8 1	nu4	n1888.41957	0.0	0.291E-03	3501.07234	1612.65277	0.0
	R R	14	10 a	15	Ee	8	a11 1	nu4	1888.48617	-482.2	0.369E-03	3592.68167	1704.14728	1.0
	P R	10	5 s	11	Ee	14	s 4-1	nu4	1888.57620	10.0	0.482E-03	2883.34833	994.77313	1.0
*	S R	13	2 a	14	Ee	20	s 4-1	nu4	n1888.95395	0.0	0.257E-04	3658.96694	1770.01299	0.0
	R R	12	2 a	13	Ee	19	a 3 1	nu4	c1889.41981	0.0	0.297E-04	3407.68025	1518.25026	0.0
	P R	10	6 s	11	A2o	6	s 5-1	nu4	1889.63010	3.5	0.821E-03	2844.73618	955.10643	1.0
	R R	12	2 s	13	Eo	19	s 3 1	nu4	1890.15660	37.0	0.157E-04	3408.09388	1517.94098	1.0
	P R	10	7 s	11	Ee	10	s 6-1	nu4	1890.59650	-5.4	0.334E-03	2798.56207	907.96503	1.0
*	P R	11	2 s	12	Eo	21	s 1 0	2nu2	n1890.74780	0.0	0.339E-04	3175.35413	1284.60633	0.0
*	S R	11	0 s	12	A2o	10	a 2-1	nu4	n1891.07099	0.0	0.253E-03	3189.79343	1298.72244	0.0
	R R	13	7 s	14	Ee	14	s 8 1	nu4	1891.33165	-67.6	0.276E-03	3503.60181	1612.26340	1.0
	P R	10	8 s	11	Eo	8	s 7-1	nu4	1891.47940	-20.1	0.253E-03	2744.69261	853.21120	1.0
*	O R	9	3 a	10	A2o	9	s 1 1	nu4	1891.55830	-12.0	0.657E-03	2748.21793	856.65843	1.0
*	N R	8	6 s	9	A2o	5	s 3 0	2nu2	1892.23030	12.6	0.156E-03	2473.00867	580.77963	1.0
	P R	10	9 s	11	A2e	3	s 8-1	nu4	1892.27870	-28.7	0.333E-03	2682.96210	790.68053	1.0
*	M R	6	6 s	7	A2o	5	a 2-1	nu4	c1892.43621	0.0	0.104E-04	2176.00752	283.57435	0.0
	Q R	12	6 a	13	A2e	7	s 6 0	2nu2	c1892.55623	0.0	0.107E-04	3298.09124	1405.56243	0.0
	R R	14	10 s	15	Eo	10	s11 1	nu4	1892.77703	15.3	0.384E-03	3596.41349	1703.63799	1.0
	P R	10	10 s	11	Eo	4	s 9-1	nu4	1892.99810	-7.6	0.759E-04	2613.17796	720.17910	1.0
*	M R	7	5 s	8	Ee	13	a 1-1	nu4	c1893.66228	0.0	0.553E-04	2356.67909	463.01304	0.0
	P R	10	7 a	11	Eo	9	a 6-1	nu4	1893.69416	0.3	0.231E-03	2802.26909	908.57496	0.0
	P R	10	8 a	11	Ee	9	a 7-1	nu4	1893.69416	-13.6	0.186E-03	2747.60228	853.90676	0.0
	P R	10	9 a	11	A2o	4	a 8-1	nu4	1893.74780	21.4	0.254E-03	2685.23360	791.48794	1.0
	P R	10	6 a	11	A2e	6	a 5-1	nu4	1893.81850	-13.7	0.521E-03	2849.47064	955.65077	1.0
	P R	10	10 a	11	Ee	4	a 9-1	nu4	c1893.83638	0.0	0.591E-04	2614.96760	721.13324	0.0
	P R	10	4 a	11	Ee	16	a 3-1	nu4	1893.86396	-136.4	0.186E-03	2921.41309	1027.53549	1.0
	P R	10	5 a	11	Eo	14	a 4-1	nu4	1894.02190	-17.4	0.268E-03	2889.29120	995.26756	1.0
*	S R	14	3 a	15	A2o	10	s 5-1	nu4	n1894.06064	0.0	0.206E-04	3916.99282	2022.93218	0.0
	R R	13	6 a	14	A2e	7	a 7 1	nu4	1894.67712	267.8	0.315E-03	3553.07739	1658.42705	1.0
	Q R	13	9 a	14	A2o	5	s 9 0	2nu2	n1894.73672	0.0	0.128E-03	3393.59331	1498.85659	0.0
*	O R	7	7 a	8	Eo	7	s 5 1	nu4	1895.17110	8.9	0.574E-04	2270.27698	375.10677	1.0
*	* R	10	2 a	11	Ee	19	* * *	**	n1895.58851	0.0	0.449E-03	2965.94632	1070.35781	0.0
*	R R	12	1 s	13	Ee	21	s 2 0	2nu2	n1895.98491	0.0	0.352E-04	3424.41828	1528.43337	0.0
	P R	10	3 a	11	A2o	10	a 2-1	nu4	1896.07350	157.6	0.797E-03	2948.60757	1052.54983	1.0
*	* R	10	1 a	11	Eo	21	* * *	**	n1896.26454	0.0	0.287E-03	2977.29226	1081.02772	0.0
*	* R	10	4 a	11	Ee	17	* * *	**	n1896.37570	0.0	0.222E-04	2923.91119	1027.53549	0.0
	R R	10	0 a	11	A2e	11	a 1 1	nu4	1896.39514	119.9	0.570E-03	2980.96435	1084.58120	1.0
	R R	13	6 s	14	A2o	8	s 7 1	nu4	n1896.91630	0.0	0.290E-03	3554.99555	1658.07925	0.0
*	M R	8	4 s	9	Eo	17	a 0 1	nu4	1896.92640	-74.7	0.123E-03	2550.80447	653.87060	1.0
	R R	14	9 a	15	A2o	5	a10 1	nu4	1897.33289	263.2	0.396E-03	3669.04894	1771.74237	1.0
*	N R	9	5 s	10	Ee	13	s 2 0	2nu2	1898.08360	-48.1	0.115E-03	2696.46292	798.37451	1.0
*	N Q	8	3 a	8	A2o	9	a 0 0	2nu2	c1898.55888	0.0	0.151E-04	2578.39483	679.83671	0.0
*	* R	13	2 s	14	Eo	20	* * *	**	n1899.27616	0.0	0.212E-04	3669.02583	1769.74967	0.0
*	O R	8	6 a	9	A2e	6	s 4 1	nu4	1899.67390	9.2	0.369E-03	2481.14373	581.47075	1.0
	R R	13	5 a	14	Eo	17	a 6 1	nu4	c1899.94290	0.0	0.825E-04	3596.87180	1696.95789	0.0
*	T R	13	0 s	14	A2o	11	s 3 0	2nu2	n1900.61213	0.0	0.201E-04	3684.21205	1783.59992	0.0
	R R	14	9 s	15	A2e	6	s10 1	nu4	1900.79426	-27.2	0.395E-03	3672.10734	1771.31036	1.0
*	O R	11	3 s	12	A2e	10	a 1 1	nu4	c1900.94091	0.0	0.152E-04	3167.88839	1266.93735	0.0
*	O R	7	7 s	8	Ee	7	a 5 1	nu4	1900.94610	5.9	0.383E-04	2275.19451	374.24900	1.0
*	Q R	11	1 a	12	Eo	22	s 1-1	nu4	1901.33080	172.9	0.886E-04	3196.85891	1295.54540	1.0
	R R	13	5 s	14	Ee	17	s 6 1	nu4	c1901.60983	0.0	0.736E-04	3598.22580	1696.64181	0.0
	Q R	14	11 a	15	Eo	9	s11 0	2nu2	n1901.84387	0.0	0.827E-04	3530.61120	1628.76733	0.0
*	O R	9	5 a	10	Eo	14	s 3 1	nu4	1902.28840	22.8	0.196E-03	2701.22095	798.93483	1.0

* O R 10	4 s	11	Eo	17	a 2 1	nu4	1902.99750	3.4	0.168E-03	2930.07564	1027.07848	1.0
Q R 12	3 a	13	A2o	10	s 3 0	2nu2	1903.50752	41.3	0.226E-04	3404.26861	1500.76522	1.0
* * R 10	4 a	11	Ee	18	* * *	**	n1903.89545	0.0	0.186E-03	2931.43094	1027.53549	0.0
R R 13	4 a	14	Ee	18	a 5 1	nu4	1904.24980	-53.4	0.399E-04	3632.60272	1728.34758	1.0
Q R 13	8 a	14	Ee	12	s 8 0	2nu2	n1904.63801	0.0	0.175E-04	3464.14946	1559.51145	0.0
* N Q 6	3 a	6	A2o	7	a 0 0	2nu2	c1904.71441	0.0	0.142E-04	2288.69027	383.97745	0.0
* * R 8	6 s	9	A2o	6	* * *	**	1904.80170	4.6	0.212E-03	2485.58087	580.77963	1.0
R R 14	8 a	15	Ee	13	a 9 1	nu4	n1904.95588	0.0	0.105E-03	3736.70087	1831.74499	0.0
* * R 12	0 a	13	A2e	11	* * *	**	n1905.07200	0.0	0.119E-04	3437.29847	1532.22647	0.0
R R 13	4 s	14	Eo	19	s 5 1	nu4	n1905.40242	0.0	0.343E-04	3633.45771	1728.05529	0.0
* * R 13	1 a	14	Eo	23	* * *	**	n1905.71957	0.0	0.121E-04	3686.11570	1780.39613	0.0
* S R 14	3 s	15	A2e	11	a 5-1	nu4	n1905.82404	0.0	0.159E-04	3928.43429	2022.61025	0.0
Q R 12	2 a	13	Ee	21	s 2 0	2nu2	n1906.16802	0.0	0.282E-04	3424.41828	1518.25026	0.0
* * R 9	5 a	10	Ee	15	* * *	**	c1906.39155	0.0	0.851E-04	2704.76900	798.37451	0.0
Q R 12	1 a	13	Eo	23	s 1 0	2nu2	n1906.94087	0.0	0.432E-04	3435.67554	1528.73467	0.0
* * R 10	2 s	11	Eo	21	* * *	**	n1907.34596	0.0	0.104E-03	2977.29226	1069.94630	0.0
* N R 10	4 s	11	Eo	19	s 1 0	2nu2	c1907.64587	0.0	0.124E-04	2934.69514	1027.07848	0.0
R R 14	8 s	15	Eo	13	s 9 1	nu4	1907.74228	-107.9	0.102E-03	3739.12523	1831.37216	1.0
R R 13	3 a	14	A2o	10	a 4 1	nu4	c1907.75412	0.0	0.300E-04	3660.39863	1752.64820	0.0
* * R 12	0 s	13	A2e	12	* * *	**	n1908.33948	0.0	0.214E-03	3440.56595	1532.22647	0.0
R R 13	3 s	14	A2e	11	s 4 1	nu4	c1908.50149	0.0	0.267E-04	3660.92263	1752.43300	0.0
* * R 12	2 a	13	Ee	22	* * *	**	n1908.69491	0.0	0.132E-04	3426.94517	1518.25026	0.0
* N R 8	7 s	9	Ee	8	s 4 0	2nu2	1909.75850	7.8	0.418E-04	2442.65175	532.89403	1.0
* M R 7	6 a	8	A2e	6	s 2-1	nu4	c1911.08316	0.0	0.212E-04	2334.30300	423.22281	0.0
* M R 8	5 a	9	Eo	16	s 1-1	nu4	1911.54480	-25.0	0.500E-04	2533.24023	621.69293	1.0
R R 14	7 a	15	Eo	14	a 8 1	nu4	n1911.54831	0.0	0.555E-04	3795.86969	1884.32138	0.0
* * R 11	1 s	12	Ee	21	* * *	**	n1911.56192	0.0	0.998E-04	3206.75769	1295.19577	0.0
R R 11	0 s	12	A2o	11	s 1 1	nu4	1911.67980	67.6	0.383E-03	3210.39548	1298.72244	1.0
P R 11	4 s	12	Eo	18	s 3-1	nu4	1911.75771	-30.9	0.907E-04	3153.86733	1242.10653	1.0
P R 11	2 s	12	Eo	22	s 1-1	nu4	1912.27000	174.2	0.170E-03	3196.85891	1284.60633	1.0
P R 11	5 s	12	Ee	16	s 4-1	nu4	1913.05640	-9.8	0.110E-03	3123.13837	1210.08099	1.0
* * R 11	1 s	12	Ee	22	* * *	**	n1913.40815	0.0	0.133E-03	3208.60392	1295.19577	0.0
* M R 9	4 a	10	Ee	18	s 0 1	nu4	1913.52980	-84.3	0.863E-04	2744.99624	831.45801	1.0
R R 14	7 s	15	Ee	16	s 8 1	nu4	n1913.72620	0.0	0.528E-04	3797.72022	1883.99402	0.0
P R 11	6 s	12	A2o	7	s 5-1	nu4	1913.87110	6.1	0.208E-03	3084.63133	1170.76084	1.0
P R 11	3 s	12	A2e	11	s 2-1	nu4	1914.34686	27.0	0.418E-03	3181.28151	1266.93735	1.0
Q R 14	10 a	15	Ee	11	s10 0	2nu2	n1914.54817	0.0	0.221E-04	3618.69545	1704.14728	0.0
P R 11	7 s	12	Ee	12	s 6-1	nu4	1914.58290	-5.0	0.944E-04	3038.61908	1124.03568	1.0
P R 11	8 s	12	Eo	10	s 7-1	nu4	1915.23580	-10.9	0.821E-04	2985.00837	1069.77148	1.0
P R 11	9 s	12	A2e	4	s 8-1	nu4	1915.83650	-14.3	0.133E-03	2923.64635	1007.80842	1.0
* O R 9	6 s	10	A2o	6	a 4 1	nu4	1915.92628	-35.4	0.165E-03	2674.31508	758.38526	1.0
P R 11	10 s	12	Eo	6	s 9-1	nu4	1916.38900	-7.2	0.466E-04	2854.34795	937.95823	1.0
* O R 8	7 a	9	Eo	9	s 5 1	nu4	1916.83970	0.6	0.892E-04	2450.50862	533.66898	1.0
* M R 7	6 s	8	A2o	6	a 2-1	nu4	c1916.88798	0.0	0.291E-04	2339.34844	422.45811	0.0
P R 11	11 s	12	Ee	5	s10-1	nu4	1916.88870	-75.0	0.226E-04	2776.89694	860.00074	1.0
R R 14	6 a	15	A2e	8	a 7 1	nu4	c1917.20063	0.0	0.572E-04	3846.76937	1929.61381	0.0
P R 11	11 a	12	Eo	5	a10-1	nu4	c1917.72258	0.0	0.170E-04	2778.71929	860.99857	0.0
* P R 12	2 s	13	Eo	23	s 1 0	2nu2	n1917.73456	0.0	0.116E-04	3435.67554	1517.94098	0.0
P R 11	10 a	12	Ee	6	a 9-1	nu4	1917.86740	17.8	0.341E-04	2856.65384	938.78822	1.0
P R 11	9 a	12	A2o	5	a 8-1	nu4	1918.08300	17.0	0.932E-04	2926.59256	1008.51126	1.0
P R 11	8 a	12	Ee	11	a 7-1	nu4	1918.40170	14.8	0.536E-04	2988.77752	1070.37730	1.0
R R 14	6 s	15	A2o	9	s 7 1	nu4	c1918.78487	0.0	0.536E-04	3848.11122	1929.32140	0.0
P R 11	7 a	12	Eo	12	a 6-1	nu4	1918.89790	98.6	0.543E-04	3043.45519	1124.56715	1.0
* M R 8	5 s	9	Ee	15	a 1-1	nu4	1919.12810	-48.6	0.544E-04	2540.19851	621.06555	1.0
P R 11	6 a	12	A2e	7	a 5-1	nu4	1919.36900	-2.3	0.108E-03	3090.60455	1171.23532	1.0
P R 11	5 a	12	Eo	16	a 4-1	nu4	1919.99930	20.1	0.444E-04	3130.50935	1210.51206	1.0
Q R 1	0 s	2	A2o	3	a 0 0	2nu2	1920.42200	-11.8	0.621E-03	1940.31307	19.88989	1.0
Q R 1	1 s	2	Ee	5	a 1 0	2nu2	1920.62040	-3.3	0.235E-03	1936.79372	16.17299	1.0
* O R 9	6 a	10	A2e	7	s 4 1	nu4	1920.73270	-0.5	0.261E-03	2679.73508	759.00233	1.0
* O R 10	5 s	11	Ee	15	a 3 1	nu4	1921.30740	-11.1	0.965E-04	2916.08164	994.77313	1.0
* O R 11	4 s	12	Ee	19	s 2 0	2nu2	n1921.66826	0.0	0.133E-04	3164.17331	1242.50505	0.0
* * R 11	2 a	12	Ee	21	* * *	**	n1921.79245	0.0	0.925E-04	3206.75769	1284.96524	0.0
R R 14	5 a	15	Eo	19	a 6 1	nu4	n1921.84879	0.0	0.140E-04	3889.59126	1967.74247	0.0
* O R 12	3 a	13	A2o	11	s 1 1	nu4	n1922.28863	0.0	0.644E-04	3423.05385	1500.76522	0.0
P R 11	3 a	12	A2o	10	a 2-1	nu4	n1922.50446	0.0	0.110E-03	3189.79343	1267.28897	0.0
* O R 10	5 a	11	Eo	16	s 3 1	nu4	1922.82090	41.2	0.103E-03	2918.08434	995.26756	1.0
R R 14	5 s	15	Ee	19	s 6 1	nu4	n1923.01653	0.0	0.130E-04	3890.49318	1967.47665	0.0
* * R 9	4 s	10	Eo	19	* * *	**	1923.38300	-38.2	0.769E-04	2754.32701	830.94019	1.0
* * R 13	1 s	14	Ee	23	s 2 0	2nu2	n1923.49424	0.0	0.102E-04	3703.63383	1780.13959	0.0
* * R 8	7 s	9	Ee	9	* * *	**	1923.52710	14.1	0.481E-04	2456.41972	532.89403	1.0
* * R 11	2 a	12	Ee	22	* * *	**	n1923.63868	0.0	0.135E-04	3208.60392	1284.96524	0.0
* * R 11	1 a	12	Eo	23	* * *	**	n1923.91777	0.0	0.383E-04	3219.46317	1295.54540	0.0
* O R 11	4 s	12	Eo	20	a 2 1	nu4	n1924.26729	0.0	0.861E-04	3166.37382	1242.10653	0.0
* * R 11	4 s	12	Ee	20	* * *	**	n1925.94457	0.0	0.762E-04	3168.44962	1242.50505	0.0
* N R 8	8 s	9	Eo	7	s 5 0	2nu2	c1926.71705	0.0	0.135E-04	2403.98157	477.26409	0.0
* * R 9	6 s	10	A2o	7	* * *	**	1926.99570	9.4	0.990E-04	2685.38002	758.38526	1.0
* Q R 12	1 a	13	Eo	24	s 1-1	nu4	n1927.48653	0.0	0.316E-04	3456.18589	1528.73467	0.0
* O R 10	3 s	11	A2e	11	a 1 1	nu4	1928.87007	121.2	0.261E-03	2980.96435	1052.10640	1.0
* * R 10	5 s	11	Ee	17	* * *	**	n1929.13806	0.0	0.112E-04	2923.91119	994.77313	0.0
* O R 9	7 s	10	Ee	10	a 5 1	nu4	1933.10030	-17.7	0.502E-04	2643.95837	710.85630	1.0
* O R 8	8 a	9	Ee	7	s 6 1	nu4	1933.30020	-2.7	0.273E-04	2411.44913	478.14866	1.0
* * R 11	2 s	12	Eo	23	* * *	**	n1934.85684	0.0	0.416E-04	3219.46317	1284.60633	0.0
* M R 8	6 a	9	A2e	8	s 2-1	nu4	1935.26650	70.2	0.323E-04	2516.73023	581.47075	1.0
* * R 12	4 s	13	Eo	20	* * *	**	1935.58600	-693.9	0.444E-05	3411.48837	1475.83298	0.0
* M R 9	5 a	10	Eo	18	s 1-1	nu4	c1936.18351	0.0	0.406E-04	2735.11953	798.93483	0.0
* * R 12	3 s	13	A2e	11	* * *	**	n1936.89442	0.0	0.655E-04	3437.29847	1500.40405	0.0
P R 12	5 s	13	Ee	18	s 4-1	nu4	1937.69120	-121.8	0.141E-04	3381.80862	1444.10524	1.0
P R 12	1 s	13	Ee	24	s 0 1	nu4	n1937.72720	0.0	0.129E-04	3466.16057	1528.43337	0.0
* O R 9	7 a	10	Eo	11	s 5 1	nu4	1938.25150	8.3	0.784E-04	2649.79863	711.54796	1.0
P R 12	2 s	13	Eo	24	s 1-1	nu4	1938.28078	358.7	0.221E-04	3456.18589	1517.94098	1.0
P R 12	6 s	13	A2o	8	s 5-1	nu4	1938.35290	-21.1	0.321E-04	3343.50878	1405.15377	1.0
* * R 10	4 a	11	Ee	19	* * *	**	n1938.41083	0.0	0.184E-04	2965.94632	1027.53549	0.0
* L R 8	6 s	9	A2o	7	s 1 1	nu4	1938.66870	46.3	0.165E-04	2519.44370	580.77963	1.0
P R 12	7 s	13	Ee	14	s 6-1	nu4	1938.82870	8.2	0.166E-04	3297.69910	1358.87122	1.0
Q R 2	1 s	3	Ee	7	a 1 0	2nu2	1938.96990	-7.5	0.143E-03	1994.90937	55.93872	1.0
* O R 10	6 s	11	A2o	7	a 4 1	nu4	1939.00810	18.3	0.129E-03	2894.11270	955.10643	1.0
P R 12	8 s	13	Eo	11	s 7-1	nu4	1939.24252	20.1	0.166E-04	3244.36788	1305.12737	1.0
* * R 10	4 a	11	Ee	20	* * *	**	n1939.25000	0.0	0.307E-04	2966.78549	1027.53549	0.0
Q R 2	2 s	3	Eo	7	a 2 0	2nu2	1939.55840	4.2	0.910E-04	1984.35396	44.79598	1.0
P R 12	9 s	13	A2e	5	s 8-1	nu4	1939.62300	13.5	0.316E-04	3183.38879	1243.76714	1.0
P R 12	10 s	13	Eo	8	s 9-1	nu4	c1939.98141	0.0	0.140E-04	3114.59005	1174.60806	0.0
P R 12	11 s	13	Ee	6	s10-1	nu4	c1940.32673	0.0	0.106E-04	3037.76527	1097.43706	0.0
P R 12	12 s	13	A2o	2	s11-1	nu4	c1940.66392	0.0	0.111E-04	2952.67265	1012.00638	0.0
* O R 13	3 s	14	A2e	12	a 1 1	nu4	n1940.71634	0.0	0.137E-04	3693.14934	1752.43300	0.0
* * R 8	8 s	9	Eo	8	* * *	**	1941.04380	7.0	0.143E-04	2418.30719	477.26409	0.0
* * R 12	1 s	13	Ee	25	* * *	**	n1941.22122	0.0	0.288E-04	3469.65459	1528.43337	0.0
* O R 10	6 a	11	A2e	8	s 4 1	nu4	1941.50820	60.7	0.146E-03	2897.15290	955.65077	1.0
P R 12	9 a	13	A2o	6	a 8-1	nu4	c1942.82958	0.0	0.185E-04	3187.20076	1244.37178	0.0

* O R 11	5 s	12	Ee	17	a 3 1	nu4	1942.89140	1.9	0.493E-04	3152.97220	1210.08099	1.0
* O R 11	3 a	12	A2o	11	s 1 1	nu4	1943.11350	69.9	0.147E-03	3210.39548	1267.28897	1.0
* O R 11	5 a	12	Eo	17	s 3 1	nu4	c1943.20719	0.0	0.437E-04	3153.72715	1210.51206	0.0
* M R 8	6 s	9	A2o	8	a 2-1	nu4	c1943.39122	0.0	0.242E-04	2524.17689	580.77963	0.0
P R 12	6 a	13	A2e	8	a 5-1	nu4	n1944.97235	0.0	0.115E-04	3350.53478	1405.56243	0.0
* M R 9	5 s	10	Ee	17	a 1-1	nu4	c1945.08130	0.0	0.397E-04	2743.45226	798.37451	0.0
* * R 12	4 s	13	Eo	22	* * *	**	n1945.62837	0.0	0.297E-04	3421.46135	1475.83298	0.0
* * R 9	7 s	10	Ee	11	* * *	**	c1946.27291	0.0	0.289E-04	2657.12980	710.85630	0.0
* * R 13	0 s	14	A2o	12	* * *	**	n1946.66820	0.0	0.300E-04	3730.26812	1783.59992	0.0
* O R 12	2 a	13	Ee	24	s 0 1	nu4	n1947.91031	0.0	0.250E-04	3466.16057	1518.25026	0.0
* O R 9	8 s	10	Eo	9	a 6 1	nu4	1949.76300	-17.7	0.243E-04	2605.41109	655.64632	1.0
* N R 10	6 s	11	A2o	8	s 3 0	2nu2	n1949.82125	0.0	0.214E-04	2904.92768	955.10643	0.0
* * R 10	4 s	11	Eo	21	* * *	**	n1950.21378	0.0	0.404E-04	2977.29226	1027.07848	0.0
P R 12	3 a	13	A2o	12	a 2-1	nu4	c1950.58109	0.0	0.119E-04	3451.35746	1500.76522	0.0
* * R 12	4 a	13	Ee	22	* * *	**	n1950.76883	0.0	0.120E-04	3426.94517	1476.17634	0.0
* Q R 13	1 a	14	Eo	26	s 1-1	nu4	n1953.72352	0.0	0.100E-04	3734.11965	1780.39613	0.0
* O R 9	8 a	10	Ee	9	s 6 1	nu4	1955.05250	1.9	0.380E-04	2611.48776	656.43545	1.0
* O R 10	7 s	11	Ee	12	a 5 1	nu4	1956.08180	-2.9	0.413E-04	2864.04712	907.96503	1.0
* L R 9	6 a	10	A2e	8	a 1 1	nu4	c1956.30206	0.0	0.202E-04	2715.30247	759.00233	0.0
Q R 3	0 s	4	A2o	5	a 0 0	2nu2	1956.64460	-2.6	0.723E-04	2075.88270	119.23784	0.0
Q R 3	1 s	4	Ee	9	a 1 0	2nu2	1956.82832	-5.9	0.336E-04	2072.36552	115.53661	1.0
Q R 3	2 s	4	Eo	9	a 2 0	2nu2	1957.39140	-4.0	0.261E-04	2061.81387	104.42207	1.0
* S R 14	0 a	15	A2e	13	s 2-1	nu4	n1957.70027	0.0	0.105E-04	4011.44315	2053.74288	0.0
Q R 3	3 s	4	A2e	4	a 3 0	2nu2	1958.36679	7.6	0.288E-04	2044.22762	85.86159	1.0
* O R 10	7 a	11	Eo	13	s 5 1	nu4	1959.36130	16.6	0.495E-04	2867.93460	908.57496	1.0
* O R 11	6 s	12	A2o	8	a 4 1	nu4	1960.92700	-2.2	0.695E-04	3131.68806	1170.76084	1.0
* M R 10	5 a	11	Eo	20	s 1-1	nu4	c1961.15088	0.0	0.265E-04	2956.41333	995.26756	0.0
* O R 11	6 a	12	A2e	9	s 4 1	nu4	1962.04260	-61.4	0.665E-04	3133.28406	1171.23532	1.0
* * R 12	2 s	13	Eo	25	* * *	**	n1962.64540	0.0	0.146E-04	3480.58638	1517.94098	0.0
* * R 9	6 a	10	A2e	9	* * *	**	c1962.69766	0.0	0.147E-04	2721.71254	759.00233	0.0
* O R 12	5 s	13	Ee	19	a 3 1	nu4	c1963.56483	0.0	0.181E-04	3407.68025	1444.10524	0.0
* O R 12	5 a	13	Eo	19	s 3 1	nu4	c1963.62090	0.0	0.160E-04	3408.09388	1444.47659	0.0
* * R 11	4 a	12	Ee	21	* * *	**	n1964.25264	0.0	0.203E-04	3206.75769	1242.50505	0.0
* * R 9	8 s	10	Eo	10	* * *	**	c1964.35727	0.0	0.142E-04	2620.00139	655.64632	0.0
* O R 9	9 s	10	A2e	3	a 7 1	nu4	1966.04220	-16.3	0.147E-04	2558.63033	592.58650	1.0
* M R 9	6 s	10	A2o	8	a 2-1	nu4	c1967.00615	0.0	0.375E-04	2725.39127	758.38526	0.0
* * R 10	5 s	11	Ee	19	* * *	**	n1971.17319	0.0	0.149E-04	2965.94632	994.77313	0.0
* O R 9	9 a	10	A2o	4	s 7 1	nu4	1971.23780	-14.9	0.233E-04	2564.74235	593.50306	0.0
* O R 10	8 s	11	Eo	11	a 6 1	nu4	1972.66340	-8.0	0.238E-04	2825.87540	853.21120	1.0
* T R 6	0 a	7	A2e	8	a 3 0	2nu2	c1975.48031	0.0	0.150E-04	2392.36802	416.88774	0.0
Q R 4	3 s	5	A2e	6	a 3 0	2nu2	1975.67896	5.8	0.145E-05	2141.00946	165.33108	1.0
* O R 10	8 a	11	Ee	11	s 6 1	nu4	1976.50150	4.1	0.297E-04	2830.40785	853.90676	1.0
Q R 4	4 s	5	Eo	10	a 4 0	2nu2	1977.04211	6.1	0.108E-05	2116.39951	139.35801	1.0
* * R 11	4 s	12	Eo	23	* * *	**	n1977.35664	0.0	0.182E-04	3219.46317	1242.10653	0.0
* O R 11	7 s	12	Ee	14	a 5 1	nu4	1978.30530	49.1	0.242E-04	3102.33607	1124.03568	1.0
* O R 11	7 a	12	Eo	15	s 5 1	nu4	1980.14730	-12.6	0.244E-04	3104.71571	1124.56715	1.0
* O R 12	6 s	13	A2o	9	a 4 1	nu4	1981.94850	-13.1	0.274E-04	3387.10358	1405.15377	1.0
* O R 12	6 a	13	A2e	10	s 4 1	nu4	n1982.31102	0.0	0.248E-04	3387.87345	1405.56243	0.0
* O R 12	3 s	13	A2e	13	a 1 1	nu4	n1983.89338	0.0	0.408E-04	3484.29743	1500.40405	0.0
* M R 10	6 a	11	A2e	10	s 2-1	nu4	c1984.03713	0.0	0.212E-04	2939.69214	955.65077	0.0
* M R 11	5 a	12	Eo	22	s 1-1	nu4	c1986.36420	0.0	0.145E-04	3196.85891	1210.51206	0.0
* O R 10	9 s	11	A2e	4	a 7 1	nu4	1988.82780	-0.6	0.221E-04	2779.50839	790.68053	0.0
Q R 5	0 s	6	A2o	7	a 0 0	2nu2	1991.04980	12.9	0.497E-04	2288.69027	297.64176	1.0
Q R 5	1 s	6	Ee	13	a 1 0	2nu2	1991.20962	4.7	0.253E-04	2285.17741	293.96826	1.0
Q R 5	2 s	6	Eo	13	a 2 0	2nu2	1991.70190	7.2	0.266E-04	2274.63832	282.93714	1.0
Q R 5	3 s	6	A2e	6	a 3 0	2nu2	1992.55550	3.6	0.559E-04	2257.07176	264.51662	1.0
* O R 10	9 a	11	A2o	5	s 7 1	nu4	1993.02544	-0.1	0.287E-04	2784.51339	791.48794	1.0
* M R 10	6 s	11	A2o	10	a 2-1	nu4	c1993.51703	0.0	0.246E-04	2948.60757	955.10643	0.0
Q R 5	4 s	6	Eo	12	a 4 0	2nu2	1993.82340	0.1	0.276E-04	2232.47599	238.65260	1.0
* O R 11	8 s	12	Eo	13	a 6 1	nu4	1995.08020	54.0	0.156E-04	3064.84628	1069.77148	1.0
* O R 13	3 a	14	A2o	13	s 1 1	nu4	n1995.21654	0.0	0.225E-04	3747.86474	1752.64820	0.0
Q R 5	5 s	6	Ee	12	a 5 0	2nu2	1995.58430	21.2	0.214E-04	2200.85128	205.26910	0.0
* O R 11	8 a	12	Ee	13	s 6 1	nu4	1997.60330	-1.3	0.167E-04	3067.98073	1070.37730	1.0
* O R 12	7 s	13	Ee	16	a 5 1	nu4	1999.67270	73.8	0.104E-04	3358.53654	1358.87122	1.0
Q R 6	1 s	7	Ee	15	a 1 0	2nu2	2007.82600	13.8	0.590E-04	2420.44892	412.62430	1.0
* T R 8	0 a	9	A2e	10	a 3 0	2nu2	c2008.06865	0.0	0.135E-04	2720.42368	712.35318	0.0
Q R 6	2 s	7	Eo	15	a 2 0	2nu2	2008.27260	8.3	0.613E-04	2409.91960	401.64783	1.0
Q R 6	3 s	7	A2e	8	a 3 0	2nu2	2009.04984	2.4	0.129E-03	2392.36802	383.31842	1.0
* M R 11	6 a	12	A2e	11	s 2-1	nu4	c2010.04835	0.0	0.141E-04	3181.28151	1171.23532	0.0
Q R 6	4 s	7	Eo	14	a 4 0	2nu2	2010.20780	-3.5	0.665E-04	2367.79233	357.58418	1.0
* O R 11	9 s	12	A2e	5	a 7 1	nu4	2011.35830	23.5	0.179E-04	3019.16437	1007.80842	1.0
Q R 6	5 s	7	Ee	14	a 5 0	2nu2	2011.82000	-8.4	0.638E-04	2336.18975	324.36891	1.0
Q R 6	6 s	7	A2o	7	a 6 0	2nu2	2013.98710	2.0	0.954E-04	2297.56125	283.57435	1.0
* O R 11	9 a	12	A2o	6	s 7 1	nu4	2014.46160	9.5	0.199E-04	3022.97191	1008.51126	1.0
* M R 11	6 s	12	A2o	10	a 2-1	nu4	n2019.03259	0.0	0.145E-04	3189.79343	1170.76084	0.0
Q R 7	0 s	8	A2o	9	a 0 0	2nu2	2024.00270	9.3	0.139E-03	2578.39483	554.39306	1.0
Q R 7	1 s	8	Ee	17	a 1 0	2nu2	2024.13170	5.5	0.707E-04	2574.88974	550.75859	1.0
Q R 7	2 s	8	Eo	17	a 2 0	2nu2	2024.52900	5.3	0.738E-04	2564.37337	539.84490	1.0
Q R 7	3 s	8	A2e	8	a 3 0	2nu2	2025.22168	4.2	0.157E-03	2546.84319	521.62193	1.0
Q R 7	4 s	8	Eo	16	a 4 0	2nu2	2026.25770	-4.1	0.840E-04	2522.29319	496.03508	1.0
Q R 7	5 s	8	Ee	16	a 5 0	2nu2	2027.70710	-8.5	0.879E-04	2490.72099	463.01304	1.0
Q R 7	6 s	8	A2o	8	a 6 0	2nu2	2029.66455	-13.0	0.170E-03	2452.12396	422.45811	1.0
Q R 7	7 s	8	Ee	15	a 7 0	2nu2	2032.25439	-10.9	0.638E-04	2406.50448	374.24900	1.0
* O R 12	9 a	13	A2o	7	s 7 1	nu4	2035.50140	-28.8	0.978E-05	3279.87606	1244.37178	1.0
Q R 8	1 s	9	Ee	19	a 1 0	2nu2	2040.18872	-6.8	0.599E-04	2748.42788	708.23848	1.0
Q R 8	2 s	9	Eo	19	a 2 0	2nu2	2040.53230	-8.2	0.628E-04	2737.92845	697.39533	1.0
Q R 8	3 s	9	A2e	10	a 3 0	2nu2	2041.13440	-14.2	0.135E-03	2720.42368	679.28786	1.0
Q R 8	4 s	9	Eo	18	a 4 0	2nu2	c2042.03884	0.0	0.741E-04	2695.91063	653.87060	0.0
Q R 8	5 s	9	Ee	18	a 5 0	2nu2	2043.31280	-11.4	0.814E-04	2664.37949	621.06555	1.0
Q R 8	6 s	9	A2o	9	a 6 0	2nu2	2045.04565	-7.3	0.174E-03	2625.82601	580.77963	1.0
Q R 8	7 s	9	Ee	17	a 7 0	2nu2	2047.35381	-8.5	0.859E-04	2580.24869	532.89403	1.0
Q R 8	8 s	9	Eo	15	a 8 0	2nu2	2050.38900	2.0	0.656E-04	2527.65289	477.26409	1.0
Q R 9	0 s	10	A2o	11	a 0 0	2nu2	2055.96835	13.5	0.778E-04	2944.46772	888.50072	1.0
Q R 9	1 s	10	Ee	21	a 1 0	2nu2	c2056.05529	0.0	0.396E-04	2940.97585	884.91558	0.0
Q R 9	2 s	10	Eo	21	a 2 0	2nu2	2056.35000	19.3	0.418E-04	2930.49836	874.15029	1.0
Q R 9	3 s	10	A2e	10	a 3 0	2nu2	2056.85460	18.2	0.909E-04	2913.03160	856.17882	1.0
Q R 9	4 s	10	Eo	20	a 4 0	2nu2	2057.62200	-0.1	0.507E-04	2888.56220	830.94019	1.0
Q R 9	5 s	10	Ee	20	a 5 0	2nu2	2058.71080	-5.6	0.574E-04	2857.08587	798.37451	0.0
Q R 9	6 s	10	A2o	10	a 6 0	2nu2	2060.20630	-2.1	0.130E-03	2818.59177	758.38526	1.0
Q R 9	7 s	10	Ee	19	a 7 0	2nu2	2062.21870	11.9	0.714E-04	2773.07381	710.85630	1.0
Q R 9	8 s	10	Eo	17	a 8 0	2nu2	2064.88720	15.8	0.723E-04	2720.53194	655.64632	1.0
Q R 9	9 s	10	A2e	6	a 9 0	2nu2	2068.39008	5.3	0.113E-03	2660.97605	592.58650	1.0
Q R 10	1 s	11	Ee	23	a 1 0	2nu2	n2071.80139	0.0	0.214E-04	3152.42825	1080.62686	0.0
Q R 10	2 s	11	Eo	23	a 2 0	2nu2	n2072.03259	0.0	0.227E-04	3141.97889	1069.94630	0.0
Q R 10	3 s	11	A2e	12	a 3 0	2nu2	2072.44763	8.5	0.498E-04	3124.55318	1052.10640	1.0
Q R 10	4 s	11	Eo	22	a 4 0	2nu2	2073.07170	14.9	0.282E-04	3100.14869	1027.07848	1.0
Q R 10	5 s	11	Ee	22	a 5 0	2nu2	2073.97050	-11.6	0.326E-04	3068.74479	994.77313	1.0
Q R 10	6 s	11	A2o	11	a 6 0	2nu2	2075.22420	-2.3	0.765E-04	3030.33086	955.10643	1.0

Q R	10	7 s	11	Ee	21	a 7 0 2nu2	2076.93310	26.2	0.448E-04	2984.89551	907.96503	1.0
Q R	10	8 s	11	Eo	18	a 8 0 2nu2	2079.22450	33.5	0.508E-04	2932.43235	853.21120	1.0
Q R	10	9 s	11	A2e	7	a 9 0 2nu2	2082.26930	56.2	0.106E-03	2872.94421	790.68053	1.0
Q R	10	10 s	11	Eo	10	a10 0 2nu2	n2086.27778	0.0	0.426E-04	2806.45688	720.17910	0.0
Q R	11	0 s	12	A2o	13	a 0 0 2nu2	n2087.40679	0.0	0.190E-04	3386.12923	1298.72244	0.0
Q R	11	2 s	12	Eo	25	a 2 0 2nu2	n2087.63905	0.0	0.103E-04	3372.24538	1284.60633	0.0
Q R	11	3 s	12	A2e	12	a 3 0 2nu2	n2087.94670	0.0	0.228E-04	3354.88405	1266.93735	0.0
Q R	11	4 s	12	Eo	24	a 4 0 2nu2	n2088.44509	0.0	0.130E-04	3330.55162	1242.10653	0.0
Q R	11	5 s	12	Ee	24	a 5 0 2nu2	n2089.16191	0.0	0.154E-04	3299.24290	1210.08099	0.0
Q R	11	6 s	12	A2o	12	a 6 0 2nu2	2090.17610	1.6	0.371E-04	3260.93678	1170.76084	1.0
Q R	11	7 s	12	Ee	23	a 7 0 2nu2	n2091.58092	0.0	0.226E-04	3215.61660	1124.03568	0.0
Q R	11	8 s	12	Eo	19	a 8 0 2nu2	n2093.49862	0.0	0.275E-04	3163.27010	1069.77148	0.0
Q R	11	9 s	12	A2e	8	a 9 0 2nu2	2096.09151	-1.3	0.648E-04	3103.90006	1007.80842	1.0
Q R	11	10 s	12	Eo	11	a10 0 2nu2	2099.42695	-54.1	0.334E-04	3037.39059	937.95823	1.0
Q R	11	11 s	12	Ee	9	a11 0 2nu2	c2104.01490	0.0	0.285E-04	2964.01347	860.00074	0.0
Q R	12	6 s	13	A2o	13	a 6 0 2nu2	n2105.13285	0.0	0.151E-04	3510.28662	1405.15377	0.0
Q R	12	8 s	13	Eo	21	a 8 0 2nu2	n2107.85007	0.0	0.122E-04	3412.97744	1305.12737	0.0
Q R	12	9 s	13	A2e	9	a 9 0 2nu2	n2110.36542	0.0	0.303E-04	3354.13256	1243.76714	0.0
Q R	12	10 s	13	Eo	13	a10 0 2nu2	c2112.78997	0.0	0.177E-04	3287.31994	1174.60806	0.0
Q R	12	11 s	13	Ee	11	a11 0 2nu2	n2116.61632	0.0	0.201E-04	3214.05338	1097.43706	0.0
Q R	12	12 s	13	A2o	5	a12 0 2nu2	n2121.72970	0.0	0.344E-04	3133.73608	1012.00638	0.0
Q R	13	12 s	14	A2o	6	a12 0 2nu2	n2134.43803	0.0	0.194E-04	3403.50887	1269.07084	0.0

Note :(I) :Assignment; (II) Identification of the upper level; (III): Vibrational band;
(IV) : Observed wavenumber in cm^{-1}. If the line was not observed,
"c" is the predicted value corrected with the average of the observed-calculated values corresponding to all the transitions included in the fit that reach the same upper state level, 'n' is the predicted value if no transition to the same upper state level has never been observed or has never been included in the fit
(V) (Obs-calc) wavenumber in 10^{-4} cm^{-1};
(VI) S_0 in cm^{-2} atm^{-1} at 296 K; (VII) Upper state energy levels (in cm^{-1});
(VIII): Lower state energy levels (in cm^{-1}); (IX) : weight used for the energy fit.